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The Farm.

Spring Work—Stump Pulling.

About five miles out of the city of Detroit, on the plank road leading to Pontiac, lies a field of about fifteen acres, belonging to Mr. S. H. Tyler. This field is like a great many others in that section of the country. An old pasture, sodded principally with natural grasses, where it is dry enough to grow them, and in the wet spots throwing up rushes and sedges, and marsh grasses. It also contains over its surface a goodly number of stumps of large dimensions, regular old settlers, the remains of the patriarchal white woods, oaks, sycamores, and beeches, which had originally flourished, and held sway over the land. Many of these stumps would measure from two to four feet in diameter, and looked as though they held possession by a full acknowledgement of the principle of squatter sovereignty, and when the proprietor looked over the field, and talked in their hearing of giving them notice to quit, these old fellows would look black as a thundercloud, and it is said by those who were acquainted with their language that they swore by the old Indian gods terrifically, it would be many a day and year before they would agree to budge an inch; they had got their roots well settled down into the soil, on which they had been born and bred as its autochthons; and they clung to it closer in their decay than when in all the pride and pomp of green leaf and varied foliage they had carried on war like titans with the elements, and bravely withstood the assaults of Boreas, and Eurus, and stout Auster, and had even defied the threats of the ruler of Olympus himself, as could be seen by the scathed sides and maimed limbs that had felt the lightning flash of his mighty thunderbolts. Not they! Never would they move until Old Time gathered them as he gathered all else, and they had become punk wood and ashes. Steel and fire had done their worst to them! They had already withstood the axe and the brand, with a dogged obstinacy that was natural to all the

stump family. They knew their time was to come. They themselves had seen the deer, the fox, the wolf, the panther, beaver and the red man all driven out, but they were left, and it was their pride and their glory to hold on to the land as the last of their race. And hold on they did; they spread out their great arms, all over the soil, no plow could penetrate, no drag could pass over the surface, no crop could grow, while their great rough, black heads stuck up stiff and strong, seam worn with many a wound and scar, and mighty ridges and wrinkles on their faces, but as unbending as ever. And travelers on the plank road, as they trotted by, would nod their heads at each other and note how fast those old fellows held on to their rights, they were good for twenty years possession yet.

But at the last State fair there was exhibited a frame containing a windlass, with long iron rods and chains attached, that Mr. Tyler thought he could use for the purpose of serving a process of ejection on the stumps; and having secured its use, he took it on the field, and began operations: the resistance was stout and firm. The stumps grunted their teeth, and looked stern and threatening when the stranger of iron, preceded by two stout oxen, and followed by a procession of four white attendants, entered upon their domain. And when operations were begun upon some of their weaker members, and they saw them taken away, they all groaned with horror at the fate which had come upon them. But when they saw the iron stranger, with his long arms going round and round and back and forward, take hold of one of their stoutest braves, then the stumps all held their breath, at the fearful struggle that they witnessed, and the thrills of sympathy when they heard the great fibres of sturdy oak crack, like the booming of artillery, were awful. But when the brave old sycamore, who had been a warrior tried and true, snapped the mighty iron clasps, and links, and straightened the hooks, and splintered the arms of the iron enemy of their race; then the stumps smiled gravely, and settled themselves firmly into winter quarters; and when they saw the wounded stranger dragged off in his stone boat preceded by the red and black oxen, with the brazen tipped horns, and followed in long procession by his attendants bearing upon their shoulders, their crowbars, hand spikes, picks, and grub hoes, a mighty shout of victory was heard rumbling like an earthquake all over the field.

But the spring came, and then we noted there was trouble among the stumps. The iron stranger had gone into training quarters, and braced his nerves with stout Lake Superior iron, and had come out for the assault once more. He tackled the big Sycamore, and after a sturdy conflict, he tore him from the earth and threw him down and vanquished him. After this the stumps gave it up and submitted to their fate, and now they may be seen lying on their faces, with their great roots in the air, scattered all over the field, and not one is left to mark the spot where they once stood so firmly, and the ground which they incumbered shall know them no more; their bones are now bleaching and drying in the wind, Eurus is whistling hyperborean airs through their twisted and gnarled skeletons, which will soon be ready for the flames, and will be offered up as a hecatomb to the elements, while their ashes will be given to Ceres for sepulture.

The iron stranger that pulled the stumps so effectually was Keeney's stump machine, it works with rods and chains on the same principle as the Willis machine, but the power is applied by a simple windlass or capstan, that is not liable to get out of order. The efficiency of the machine which is worked by hand power quite effectually, four men being a full force, is graduated by the strength of the rods and chains. If they are stout enough for the strain to which they are submitted, then the power of the machine is capable of being increased to any extent by lengthening the capstan bars. In the field several moderate sized live trees were pulled out as well as the stumps. Two men and a pony to do the drawing of the chains and rods from stump to stump could work the machine well enough for ordinary purposes.

A few Words about Grass Seeds.

We have recently received from C. L. Fint, Secretary of the State Board of Agriculture, a tract published by order of that body on the subject of the culture of the grasses, from which we make the following extract relative to the quantity of seed used:

"I hold this proposition to be indisputable, that any soil will yield a larger and more nutritious crop, if sown with several kinds of nutritious grasses, than when sown with only one or two species. Indeed, it is a fact well established by careful experiment, that a mixture of only two or three species of grasses and clover, will produce a less amount of hay than can be obtained by sowing a larger number of species together. There may be some exceptions to this rule, as in cases where the yield of Timothy and Redtop, owing to the peculiar fitness of the soil for these grasses, is as great as can stand on the ground covered by them.

But it is nevertheless true, that if we sow but one kind of grass, however abundantly the seed may be scattered, or on whatever soil it may be, or under however favorable influences, yet only a part of the plants will flourish; vacant spaces will occur throughout the piece which will be filled up after a time with grasses of an inferior quality, weeds or mosses. This is the case in some degree also where only two, or a small number of species are sown; while if a mixture made up of a larger number of kinds of seed is used, the plants will cover the entire surface and produce a far better quality of herbage.

In sowing such a mixture of several different species, we do but follow nature, who, after all, will generally be found to be the best teacher, for wherever we cast our eyes over an old, rich, permanent pasture, we ordinarily see from fifteen to twenty species of grass or forage plants growing in social profusion. If the soil be very poor, as a cold, hard clay, or a barren sand, perhaps two or three varieties will suffice, but on good soils a larger number will be found to be far more profitable. Especially is this the case where the land is to be left in grass for some years, and eventually pastured, as is frequently done in New England, for it is then desirable to have grasses that reach their maturity at different times, as a constant succession of good feed throughout the season may thus more surely be obtained. It is well known that there is no month of spring or summer in which some one of the grasses does not attain to its perfection, if we except the month of March. For good soils, eight or ten species of the grasses or six or eight of the grasses proper and one or more of other herbage plants would probably be found to be profitable.

I am aware that the prevailing practice is decidedly against the use of anything but Timothy, Redtop, and clover, and that very large crops of these grasses are often raised; but it is nevertheless true, that we obtain on an average, less than a ton to the acre, while with the same culture and a larger number of species we ought to get double that quantity.

Before proceeding to consider the proportions in which the different species should be mixed, it may be well to refer to the mode generally adopted for estimating the quantities of seeds and their relative weights. Old or poor seed weighs less than that which is fresh and new. Now if a farmer buys by weight, even if he does get an old or inferior quality of seed, he gets a much larger number of seeds, and this larger quantity of seed which he receives for his money, may make up for the inferior quality, and he will have a larger number of seeds capable of germination than he would have if he bought by measure. It is to be regretted that it has become so nearly universal to purchase by measure, though as this course is for the seller's advantage, it may be difficult to change the custom.

I have expressed the opinion that we limit our mixtures to too few species, thus failing to arrive at the most profitable results, and have said that, in a piece of land seeded with one or two favorite grasses only, small vacant spaces will be found, which in the aggregate will diminish very considerably the yield of an acre, even though they may be so small as not to be perceived. It might be thought that this could be avoided by putting into the

ground a very large number of seeds. But a knowledge of the quantities of seed ordinarily used in this State for sowing, and an inquiry as to the number of plants necessary to cover the ground with a thick coating of grass, will show that this is not the case. I have in my possession letters from some of the best farmers in all parts of the Commonwealth, in which they state it to be the prevailing practice to sow a bushel of redtop, a half bushel of Timothy, and from four to six pounds of red clover to the acre. Some of them vary the proportions a little, as by the use of one peck of Timothy and a larger quantity of clover, but the general practice is to use nearly the quantities stated, some even using a considerable larger quantity. Now if we examine the table (given in the Report) we shall find that in an ounce of redtop seed there are 425,000 grains. In a pound there are 6,800,000 seeds; in a bushel, or twelve pounds, there are 81,600,000 seeds. Now take only one peck of Timothy seed to mix with it. In an ounce of Timothy grass seed there are 74,000 grains. In a pound there are 1,204,000 grains. In eleven pounds, or a peck, there are 13,244,000 seeds, and if we take but four pounds of clover, which is below the average quantity used, we shall find by the same process that we have 1,024,000 seeds. If now we add these sums together, we shall find that we have put upon the acre no less than 95,868,000 seeds! This gives over 15 seeds to the square inch, or about 2,000 seeds to the square foot!

Now it is a well known fact that the sward of a rich old pasture is closely packed, filled up, or interwoven with plants, and no vacant spaces occur. Yet, in a closely crowded turf of such a pasture, only one thousand distinctly rooted plants were found on a square foot, and these were made up of twenty different species. The soil should be supplied with a proper number of plants, else a loss of labor, time and space will be incurred; but however heavily seeded a piece may be with one or two favorite grasses, small vacant spaces will occur, which, though they may not seem important in themselves, when taken in the aggregate, will be found to diminish very considerably the yield of an acre, even if they are so small as not to be perceived. And undoubtedly some allowance should be made for the seeds and young plants destroyed by insects, birds, and various accidental causes; but even after all deductions for these, we see that in this State, at least, there is no deficiency in the quantities of seed used, and the imperfectly covered ground cannot be explained in this way.

We sow seed enough, frequently, for fifteen plants to the inch, but rarely obtain above two or three, and very frequently even less than that.

The difficulty of producing the seed, and its expense, have been the strongest objections to the use of many species. A demand for these species, however, would soon remove this difficulty, and varieties would everywhere be kept for sale at a reasonable price. When it is considered that the additional expense of sowing a field or permanent pasture with a greater number of species will be, comparatively, very small, while the additional yield will be proportionally large,—if the result is as favorable as the opinion of many who have made the trial would lead us to expect,—every farmer must admit that it is for his interest to try the experiment, on a small scale, at least.

Spanish Merinoes for Texas.

Messrs. J. L. Voorheis, of Texas, and A. L. Dibble, of Marshall, Mich., recently started with one thousand Spanish Merino ewes for the beautiful plains of Texas.

Half of the number were purchased in Washtenaw county, and selected from the well-known and esteemed flocks of Horace Welch, J. Starkweather, Smith Botchford, Lyman Lake, Col. White Sanford and J. D. Mc Masters; the balance were purchased of flock masters of no less note for their excellent fleece in Calhoun county, and together form one of the most perfect flocks that could have been started from this State to improve the flocks of the sunny South.

These gentlemen, for their good judgment, industry and perseverance, are well deserving

success in this great enterprise, and those in Texas who are so fortunate as to become their owners, may justly feel proud of the acquisition, not only as individuals, but as benefactors to their State. We hope to hear of their safe arrival to the place of destination in due time. Thus has the long mooted question been settled with regard to the production of fine wool south of the Chesapeake so strenuously disbelieved and advocated by the early importers of this variety in the country.

FARM MISCELLANEA.

Corn Cobs of Little Value as Manure.

A correspondent of the New Hampshire Journal of Agriculture states that last year having found that cobs were of no value as food, he thought he would try them as manure. He therefore had some ground, and took the meal and manured in the hill in alternate rows. The result so far with corn was that there was no perceptible difference in the crop where the cob meal was applied and where it was not.

Stock Sale.

Speaking of Seth Bushnell's sale which takes place on the 31st of May, the Ohio Cultivator says:

"It is too bad that the fine establishment of Seth Bushnell has to be broken up. Such another noble farm and so excellently stocked, is not to be found in the market, any where in that corner of Ohio, and Seth is one of the finest haired fellows we know among them. There's a chance for bargain."

Garlic for Stock.

Garlic, says the Stock Journal, operates in the system of the horse as a diffusible stimulant, expectorant, and deuretic. It is therefore a valuable remedial agent in maladies requiring an agent possessing these properties. On the eastern coast of China it is regularly furnished to neat stock, and they are never known to suffer any inconvenience from its regular daily use; in fact they enjoy a most extraordinary immunity from disease.

Smoking Seed Corn.

At a late discussion of a farmer's club in Illinois, Mr. Ide said that he selects his seed ears in the field before frost; hangs them in a smoke-house—the more smoke the better. The pyroligneous acid imbibed by the corn will bring it up in dry or hot weather, and at the end of four weeks the growth will be twice that of corn planted at the same time without smoking, and will be left entirely, alone by the mice, squirrels or worms.

Salt for Milk Cows.

In a statement made before the Farmer's Club at Little Falls, N. Y., L. Barnold says, the amount of salt derived from perfect vegetation is generally sufficient, but not always animals being singularly unequal in the amount they require. Deer and some others seem not, at any time, to obtain enough from their food; cows in the full flow of milk can seldom be sufficiently supplied in this way.—Nature has not supplied salt enough in their food to maintain the unnaturally large yield of milk they can be induced to give; it can only be kept up and perfected by adding salt artificially, and this should be done daily.

Feeding Meal.

To feed meal alone to cows is to feed it at a loss. It is a better way to feed it with pulped roots, or with hay or straw. If the hay is uncut, it should be well sprinkled with water, and the meal dusted upon it. Experiments have been detailed at the Farmers' Club, which showed that fine food, like meal, when fed alone, is passed along the side of the 1st, 2d, and 3d divisions of a cow's stomach, and is lodged at once in the fourth. By receiving only the action of the fourth division, it is not fully digested. But by adhering to the wet hay, it is carried with the hay into the first division, and receives the action of the whole stomach, and consequently a more thorough digestion. The meal adheres better to be ground very fine.—Dairy Farmer.

Painted Vessels for the Dairy.

At a discussion held by the Club of Little Falls, N. Y., it was established that newly painted vessels were the cause of discolored cheese, and that such cheese was more or less poisonous. The evil was to be met by painting tubs and pails in advance of their use, and their soaking them in whey or water until the poisonous substance in the lead was extracted. Tin vessels were considered the most economical, as less troublesome to keep clean and sweet, besides being light and easily handled.

Soiling.

We find in the Maine Farmer a communication from a gentleman to the Board of Agriculture in that State, which we think deserving of attention. For the present, we cite but two advantages derivable from a system recommended, with a bare enumeration of others:

"Subsoiling," says the writer, "is a comprehensive term that comes to us from the old countries of Europe; and means the keeping of cattle in stables and yards, all the year with only a daily or an occasional liberty to ramble over small enclosures, as circumstances may admit."

"This mode of keeping cattle has long been pursued in Germany, France and other Continental countries, and was thence introduced into England, where it has obtained very generally adoption, and with profitable results. Many thorough and intelligent farmers of our own country are now practicing it on an extensive scale, with great and decided advantage."

"Our farmers and cattle owners may urge that the climate and soil of Maine, the value of lands and so forth, preclude the adoption of a system so radically differing from our prevailing mode, however plausible it may appear from data drawn from the customs adopted by the force of circumstances, in the densely peopled countries of Europe."

HIS OWN EXPERIENCE.

"I have some personal experience in this matter. For the last eight years I have, as a farmer, occupied but a few acres, unproductive at first—and have kept two cows and a horse, and during the whole of this time my cattle have not for a single week obtained their full living by pasturage; and for the most part of each summer but a small portion of it."

"Having thus partially adopted the soiling system in my own practice, I have been led to examine and inquire into its practical workings elsewhere. What I have here accomplished, on the soil, and under the climate of Maine, is to me reliable data for future operations, and has enabled me to draw just conclusions, touching the theory and practice of those whose operations have been laid open to the public."

THE SIX BENEFITS OF SOILING.

"The advocates of soiling, claim to have established the truth of these six propositions:

1. The saving of land.
2. The saving of fencing.
3. The economizing of food.
4. The better condition and greater comfort of the cattle.
5. The greater product of milk.
6. The attainment of manure.

"To offset these advantages, we have the labor of raising and cutting the food, and the feeding and care of the stock."

THE GREAT SAVING OF LAND

"Is a fact established by concurrent testimony everywhere. To what extent this saving has been carried, we will show by introducing a few witnesses. Quincy says: 'European writers assert that the saving which results, is as one to three; others say, as one to seven. Others still, that the saving is yet greater; that is, one acre kept for soiling, will go as far as three or seven, or more, kept for pasture, in the support of stock. On farms where the whole soil is capable of being plowed, the economy of soiling is great.'

"It may be, however, useful to observe that the reason for the diversity of statement, in relation to the degree of saving, results from the different ways in which the land used for soiling is cultivated for the purpose of raising food. Some satisfy themselves with enriching the former pasture and cutting the grass it produces, for the soiling use. Others plow up the pasture; raise cabbages, or other succulent food, on which they support their stock. Now it is plain, the result of a comparison of saving of land made between an acre appropriated to the latter of these modes of husbandry, must be very different. In either case, the economy is sufficiently great."

"The maximum product of an acre of land has nowhere yet been determined. The amount obtained often surprises us."

From the reports of a Committee of the British Parliament, showing the condition of small farmers, we find much of interest in the result from exact and high cultivation, and much that bears directly on the above proposition.

"In one case, of a man who held an allotment of four acres; in one year he obtained forty-two bushels of wheat, two hundred and fifty bushels of potatoes, and ten bushels of barley; and kept two cows and four pigs. The cows were kept entirely on the products of the four acres. A portion of this was not arable, as some trees were growing upon it."

"An inquiry was made of the occupant of a small allotment, 'how it was possible to keep two cows, and maintain a family of five per-

sons, on only three acres of land.' He answered: 'The statement you saw was very true; half an acre of pasture, half an acre and eight rods in wheat, and one-quarter of an acre in oats; the other part was green food for the cows, such as tares, cabbages, clover, mangolds, turnips, and Italian ryegrass.'

"This is a pretty strong case; where it is shown that two cows were kept the whole year on the produce of eight rods less than one and three-fourths acres of land, with only the addition of a half acre of pasture, and the straw from four-fifths of an acre of grain, abating the vegetables consumed from the same land, by a family of five persons."

"In a communication to the British Board of Agriculture, it is stated that thirty cows—one bull, four calves, and five horses, were fed through the summer, from fifteen acres of clover, sown the preceding year. The labor of four persons was sufficient to tend them; and the net produce of the same season, in butter, from June to October, was £19 10s.—over \$95 per cow. Forty animals to fifteen acres, gives sixty square rods (three-eighths of an acre) to each. Sixty square rods in clover producing a net income of over \$95!

"After twelve years experience with the system, Mr. Quincy writes: 'From my own experience, I do not hesitate to state that three cows may be kept during the summer season, in full milk and in high condition, on a single acre.'

"Adam Anthony, of North Providence, R. I., entered upon a farm in 1826, of the extent of seventy-two acres, suitable for tillage. The land was very sandy; and the crops of that year were five tons of hay, two tons of oats, two hundred bushels of potatoes, two hundred of turnips, some fruit, and garden vegetables; worth, including pasture feed, \$385. He adopted the soiling system. In 1847, he reports the produce of the farm as two hundred tons, by estimate, of green fodder for soiling, one hundred tons of hay, twenty-five tons of millet, seventeen tons of corn fodder, six hundred and forty bushels of potatoes, seven hundred and fifty bushels of Indian corn, fruit and garden vegetables, the value of which is \$3,575; nearly tenfold increase in the product of the farm. The stock consists of about forty head, of which thirty-six are usually cows."

"Similar testimony might be very much extended, but it is unnecessary."

THE SAVING IN FENCING.

"The present American system of farming involves a prodigious expenditure of human energy for fencing. I have seen it estimated that the cost of fencing in these United States is more than six hundred millions of dollars (\$600,000,000). Whether more or less than this enormous sum, it is so much invested in human toil, a large portion of which might have been saved and applied to better and more ennobling purposes, had our early system of custom and laws been what they ultimately must be."

"One-half of all farm fences are interior; and aside from an occasional necessity for making a permanent distinction between arable land and a piece that nature designed for a pasture, they are worse than useless."

"Adopt a single principle, that no beast shall be permitted to range on lands adapted to the plow and the scythe, and you are prepared to wipe off from the face of our fair country, much that disfigures it, and abolish, at once and forever, a vast item in your annual taxation."

"The most false of anything that assumes the name of economy, is the practice of pasturing mowing lands. Interior fences, that were erected and are maintained for the sole purpose of enabling the proprietor to pasture his mowing lands, have cost the farmers of Maine a very large sum. To call in the aid of arithmetic, it will read in this wise: The improved lands in the State may now be set down at two and a half millions of acres (2,500,000.) Taking the estimate by very good authority, of ten rods of fence, at one dollar per rod, for each acre of improved land, gives us for fences in the State, the sum of twenty-five millions of dollars (\$25,000,000.) Half of this sum, \$12,500,000, we will set down for interior fences on farms. It may be fair to assume for annual erections, while the present system continues, for changes and repairs, ten per cent. of this sum, or one million two hundred and fifty thousand dollars (\$1,250,000,) which the farmers of the State are annually paying as a direct tax on their resources, and on which very few have heretofore had the courage to raise their voices in complaint. Impressed with the truthfulness of such estimates, who can for another year remain quiet and see a system of husbandry continued, so blighting to the general prosperity?"

"By the last census, we find that the whole number of our domestic animals of all ages,

reducing the number of sheep by a fair standard of comparison, to neat stock and horses, is to the improved land in the State, as one animal to four and three-fourths acres."

"Besides the direct expense of erecting and supporting interior fences, they offend by harboring all sorts of vermin. They protect a rare assemblage of brush and noxious weeds or cost the farmer much labor to have it otherwise. They occupy, with the necessary head-lands left in plowing, much space on the farm, and it is all worse than lost."

"Then the loss in time, in the extra turnings of the team in small inclosures, in using the plow, the harrow, cultivator, roller, mowing-machine, and horse rake is no inconsiderable item in the season's operations. I really believe that the plowing done in this State, with our heavy teams and prodigious plows, will show an average length of furrows not exceeding twenty-five rods. In this country of deep snows, our fences often cause immense drifts, which remain late in the spring, keeping the ground wet, and greatly retarding operations."

Hatching and Care of Young Chickens.

As the season has arrived when the fancier and breeder is making preparation to increase his stock of poultry, a few hints may not be inappropriate or useless to the general reader."

In making arrangements to hatch poultry, nature is the best guide to study. But as our domestic poultry are in an artificial state, a slight deviation from the natural laws must in most cases be observed, for while fowls in a wild state lay no more eggs than they can cover, we find it more profitable to remove their eggs from day to day—for by so doing we increase the number from each—and consequently derive more profit from them. Again, in a state of nature we find fowls make their nests on the ground, on or under some dry, warm and well protected ledge or bank. This method cannot be acted on unless the nest is protected from all sorts of vermin, as we have frequently had a whole hatching of eggs stolen in the night from under a hen. The only rule that can be given is to study nature—and follow her rules, as near as may be, varying to suit the particular circumstances under which you are situated. Some fowls will not often manifest a desire to set, unless a number of eggs are suffered to remain in the nest; while others will, after laying a certain number varying from 15 to 50, show a desire to set longer, which is readily known by clucking, which is continued until her chicks are half grown. In some cases if their desire to set is not humored by giving them eggs, they will in a few days go to laying again, and in others it grows in a few days to an ungovernable passion, and they cannot be deterred from their purpose, either by removing their eggs, or by a cruel practice observed by some of dousing or half drowning them in cold water. The proper way when you do not wish them to set, is to put them in a small room or box without a nest, in which is a perch to roost on; and any fowl but an old inveterate will give over in the course of four or five days. On the other hand, when it is desired to have them set, it is best to try them with chalk or porcelain eggs for a day or two before putting under the eggs you design for hatching; but previous to setting the fowls, the nest should be examined to be sure it is free from lice—and fresh hay or straw should be furnished, among which it would be well to sprinkle dry wood ashes, tobacco stems, or pennyroyal, which will serve as a preventive to their becoming lousy. The number of eggs must of course vary, according to the size of the eggs and the hen,—from nine to fifteen is the usual number; be sure and not put too many under, and the newest laid eggs of the average size should be the ones selected. The best hens for setting and rearing their young, are those from two to three years of age, with a broad body well feathered, and large wings and not too long on the leg."

Twenty-one days is the usual time in which a good sitter will bring out her chicks, and as soon as she becomes a mother, a change in her character is at once noticed. The following beautiful remarks from an eminent author (Dickson), on the maternal character of the hen, so nearly embodies what we would write, that we cannot forbear the quotation: "The tenderness and solicitude of the hen for her little ones, and the alteration which maternal love has produced in her temper and her habits, are really worthy of admiration. Previously, she was ravenous, insatiable, vagrant and timid; but as soon as she becomes a mother, she becomes frugal, generous, courageous, and intrepid; she assumes, indeed, all the qualities that distinguish the cock, and even carries them to a higher degree of perfection. When we see her come into the poultry yard, surrounded

by her little ones, for the first time, she seems as if proud of her new dignity, and took a pleasure in performing her duty. Her eyes are lively, animated, and constantly on the alert; her looks are so quick and rapid, that she could take in every object at one glance; and she appears to discover at once the smallest seed on the ground, which she points out to her young ones; and, in the clouds, the birds of prey she dreads for their sake; and giving them notice by a doleful cry, she induces them immediately to hide themselves under her protecting wings."

"Incessantly taken up with the welfare of her chickens, she excites them to follow her, and to eat. She picks their food; she scratches the ground in search of worms, which she gives up to them; she stops now and then, she squats down, and forming a cradle as it were with her wings, she invites her tender offspring to come and gather round, and warm themselves beneath her. She continues to bestow these cares on them till they are no further use to them, which takes place when the chickens are quite feathered, and when they have come to half the size they are to grow to."

The first day after hatching, the chicks do not need food, and should remain in the nest. The second day they should be removed to a dry and sheltered spot, where they may be warm and not exposed to the scorching rays of a meridian sun, and may be fed sparingly but often, with hard boiled eggs, curd, coarse meal and millet, but all watery food should be avoided. When eight or ten days old, scalded Indian meal, screenings, millet, etc. will be readily eaten. Pure water should always be at hand in shallow vessels, and care must always be observed to keep them from the damp. When they run it should be in a grass plot, and be kept in their coops until the dew is off the grass, for experience has shown that cold and damp, when combined, is a most fruitful source of disease in all poultry, but more especially fatal to the young. At the end of six weeks the chickens, having become large and strong, are usually left by the hen, who goes to laying again and will in the course of five or six weeks have another brood; but as my remarks have been more extended than I intended, I must defer until some future time some other hints in regard to the management of poultry.—E. S. Ralph, Buffalo, in Am. Stock Journal.

Spaying Milch Cows.

Mr. Eben Wright, of Dedham, Mass., the Secretary of the Massachusetts Horticultural Society, was recently present when the operation of spaying was performed upon a number of cows, by Dr. Dadd, and he gives the following account, which was published in the Boston Transcript:

"The spaying of cows is no new feature. As practiced in former days it seemed a cruel performance; but, since the alleviating influence of ether, the term cruelty can no longer be applied, for in five minutes the animal is so fully under its effect as to be insensible to pain, and in twenty minutes the operation is completed and the animal is quietly making way with her allowance of food."

Yesterday I was present to witness the operation of spaying of five cows of the herd belonging to Edward R. Andrews, Esq., Home Farm, West Rockbury. This farm is devoted entirely to the production of milk for the Boston market. Mr. Andrews had previously had eight cows spayed, and after one year's trial, so satisfactory in all respects had been the result, that he was determined to subject other animals to the same operation as they came into full milking, until his entire herd, consisting of some fifty head, should in like manner be made remunerative."

At 10½ o'clock A. M., the hour assigned, Dr. Dadd, accompanied by three of his students, commenced the operation by casting the first cow on a bedding of hay on the barn floor. Immediately a sponge, saturated with ether and chloroform combined, was applied to the nose and kept there in a leather bucket, till the close of the operation. In five minutes the animal was so insensible to pain that the veterinarian commenced with his scalpel and bistoury, opening a place on the left side equidistant between the lower rib and the hip, cutting through the cellular membrane and the peritoneum, when he introduced his hand and removed the ovaries. The small quantity of blood which flowed during the operation was sponged out as the cutting progressed. The parts were stitched, the ether removed, and ere the tethers could be removed the animal was feeding off the litter on which she was lying."

It was a pleasure to learn that Dr. Dadd has been eminently successful in all like operations, whether performed for lactical or fattening purposes. Mr. Andrews' cows have continued in full milk, and have proved uniformly healthy and quiet, and this disposition to quietness may as a consequence give an enhanced value to milk coming from the farm, at least for infants requiring to be fed from the same cow the year round."

MICHIGAN STOCK REGISTER.

SHORTHORNS.

Numbers with an "e" following them refer to the English Herdbook—all others refer to the American Herdbook, unless otherwise noted.

No. 133.—GIPSEY QUEEN. Roan Heifer.—Calved Nov. 7, 1859. Bred by M. L. Brooks of Novi, Oakland co., Michigan. Owned by H. A. Tillotson, Park Farm, Marshall, Calhoun co., Mich. Sire, John O'Gannt 17073, by John O'Gannt 11,621e, out of imported Romelia, by Flageolet 9180e. Romelia was imported by L. G. Morris of New York. Dam, Mayflower, by Rocket 920, bred by Jas. Wadsworth of Genesee, N. Y.
1 g. dam, Lady Weddle, by old Splendor 767.
2 g. dam, Moss Rose, by American Comet 9, by imported Charles out of imported Primrose; all Weddle stock.
3 g. dam, Red Rose, bred by Mr. Weddle of Rochester from a cow imported by him from the herd of Major Bowen of Welham, Yorkshire, England.

HEREFORDS.

No. 2.—LADY SOTHAM. Calved April 23, 1853. Bred by Wm. H. Sotham. Owned by J. & C. M. Bowen, Lima, Michigan. Sire, Popinjay 2d, 65a, by Popinjay 161 of the English Hereford Herdbook. Dam, Syracuse 58a, by Conqueror 88a.
g. dam, Short Tail 21a, by Young Prize, son of Matchless, imported.

No. 3.—GALLANT. Bull. Calved April 30, 1856. Bred by A. & H. Bowen, of New York. Owned by J. & C. M. Bowen, Lima, Michigan. Sire, True Boy, by Popinjay 2d, 65a, out of Bombazine, imported. Dam, Young Matchless, g. dam, Beauty imported, by Trojan 2d.

No. 4.—EXCELSIOR. Bull. Calved Oct. 20, 1857. Bred by J. & C. M. Bowen, Lima, Mich. Sire, Gallant, by True Boy, by Popinjay 2d, 65a. Dam, Lady Sotham, by Popinjay 2d, 65a. g. dam, Syracuse 58a, by Conqueror 88a. g. g. dam, Short Tail, imported, 21a, by Young Prize, son of Matchless.

No. 5.—WOLVERINE. Calved Jan. 15, 1859.—Bred by J. & C. M. Bowen, Lima, Mich. Sire, Gallant, by True Boy, by Popinjay 2d, 65a. Dam, Lady Sotham, by Popinjay 2d, 65a. g. dam, Syracuse 58a, by Conqueror 88a. g. g. dam, Short Tail, imported, 21a, by Young Prize, son of Matchless.

No. 6.—COQUETTE. Calved Dec. 1859. Bred by J. & C. M. Bowen, Lima, Mich. Sire, Gallant, by True Boy, by Popinjay 2d, 65a. Dam, Lady Sotham, by Popinjay 2d, 65a. g. dam, Syracuse 58a, by Conqueror 88a. g. g. dam, Short Tail, imported, 21a, by Young Prize, son of Matchless.

FARM NOTES.

Muck on Sandy Land.

David Fisher of Walpole, N. H., writes to the Boston Cultivator, that he has watched the operation of hauling out muck on sandy land, fresh from the marsh, and found that it did not operate as a benefit. It was tried also by hauling out and letting it lie a year on the ground before being plowed under, but even then it did not have a beneficial effect. He says:

"Another neighbor of mine got out seventy loads of muck and put it in his barn and hog yards, which when applied to his sandy land proved to be excellent manure; but as it was considerable extra work to cart the muck to the barn-yard, he concluded to let the next lot he got out of the swamp lay on the ground one year and then plow it in; by this management, as he lately told me, the land to which it was applied was not benefited. Another neighbor of mine has used swamp muck for many years with uniform success. Immediately after haying, he carts it into his barn-yard and lets it lay till the next spring; by this management it is incorporated with the barn-yard manure, and being applied to his sandy and gravelly land has produced good crops of corn and other grains, and when stocked to grass has produced from two to three tons to the acre."

Farm Gates.

A correspondent of the Valley Farmer makes the following calculation:

I have a gate, hung in the ordinary manner, which I think is opened at least fifty times each day. Now, I have had the curiosity to estimate the amount of time consumed yearly in the operation. Fifty times per day, at one-half minute each time, will make twenty-five minutes daily; which, multiplied by 365, will amount to 9125 minutes—that is, 152 hours, or 12½ days. Computing 12 hours for each day, during which the gate would probably be in use, I have also had the curiosity to inquire what the hangings for a self-closing gate would cost—and find forty cents will buy one set.

Twelve and one half days, at 50 cents per day (a very small estimate), would amount to \$6.25, or over 1500 per cent in one year on the investment. Again, such hangings would probably last ten years, and would consequently save in time alone during said ten years, one hundred and twenty-five days; which would, at 50 cents per day, amount to the snug sum of \$62.50; not to mention the certainty of keeping cattle, hogs, poultry, &c. &c. in their proper places, and the saving consequent thereon.

American Wines.

The American wine growers association at Cincinnati, at its late meeting adopted the Catawba wine as the standard, and marked it 100. The lowest point on the scale is 50. We note that several samples presented were marked only 75, and that one kind shown as made according to champagne rules, was marked as high as 107.

The Garden & Orchard.

Summer Fruits for the Table.

BY T. T. LYON, PLYMOUTH, MICH.

No. I.

Amid the cares and hardships incident to the settlement of a new country, few persons, except those of decidedly horticultural tastes, find time and opportunity for the planting of small fruits, if we except the currant, which is, so frequently planted in the form of a hedge about the compartments of the kitchen garden, or the door yard, and left to maintain the ground unaided against the grass and brambles that usually spring up in neglected situations. To this state of affairs, however, there are numerous exceptions, even in the rude pioneer settlements of our country; and along with the march of improvement comes not only the ability, but the disposition to improve in this respect.

In making a collection of summer fruits the currant, from its entire hardiness, fruitfulness, patience under neglect, and the long time it remains in season, must, doubtless, retain the first place. There are many recent introductions which are claimed to be improvements, and which, certainly, are such so far as size is concerned, but we have as yet no conclusive evidence that any of them are preferable, or even as really desirable, as the Old Red and White Dutch, which make up the common stock of our country. The White Grape, the Cherry, and the Versailles are very large and showy, and, for this reason, the first two, especially, are recommended by some as profitable market fruits; although the second, especially, is exceedingly acid, while it is not claimed that either will produce, by measure, a larger crop than the Red Dutch, under similar treatment. Versailles may prove more valuable than either, but it is yet but partially tested. White Grape is somewhat larger than White Dutch, but will yield no better by measure, and is no better in quality; while the bush is a very spreading grower, throwing out long, horizontal branches, which are much in the way of cultivation.

As generally managed, or rather, not managed, the plants are suffered to grow in broad stools, constantly extending by the sprouting of buds beneath the ground, while the older shoots soon become weakened by the diversion of their share of nourishment, and yield fruit only of diminutive size. When the plants are grown in this manner, the size of the fruit must be kept up by cutting out in the spring the old and stunted shoots, and also such young ones as have grown up weak and slender, leaving only strong, young shoots for the production of fruit.

Another plan, which will produce fruit of the finest quality, and which renders the plants easy of cultivation, is to raise them from cuttings, from which all the buds, except a few at the top, have been cut out, leaving no buds below ground. Such plants cannot produce sprouts from beneath the surface, and, consequently, may be grown as miniature trees. As, in this form, the vigor of the root is not liable to be diverted to the production of sprouts, the result is an increase both in the size and yield of fruit. Plants grown in this manner are liable for a year or two, at least, after planting out, to require staking as a safeguard against prostration by storms of wind or rain, during the growing season.

It is also believed that plantations grown in this manner will sooner require renewal, as there can be no reproduction of either stem or root. This, however, is of very little weight compared with the resulting advantages, as the renewal is not an expensive process, while it is occasionally necessary which ever process may be adopted. Persons who have been only used to this fruit as grown upon plants left to take care of themselves, would be surprised at the large size to which even the common varieties may be grown under proper management.

With a supply of the Red and White Dutch for the main crop, we prolong the season two or three weeks by adding a few plants of May's Victoria; which, though not a strong grower, nor of the highest quality, is of fine size, and quite desirable after others are gone. For cooking purposes, a few plants of Black Bangup will also be found desirable, as a means of still further prolonging the season. This last variety is believed, also, to be superior to all others for the production of currant wine. Another variety, called Black Bangup, is attracting some attention, and claims to be the largest of all currants. It is yet but little known.

Plymouth, May 7th, 1880.

T. T. LYON.

Notes on the Peach.

BY MISS M. H. MORRIS OF GERMANTOWN IN GARDENERS MONTHLY.

I have read with much interest the letter from Mr. Dana, enclosed in your note of March 1st, describing the effects of the Red Spider on the Peach trees in Massachusetts, and also examined with great care the eggs on the peach bark sent with the letter. This species is new to me.

I have no doubt of the truth of Mr. Dana's statement, that trees so infested will, and must be victims to such a pest, and that those trees do die of the yellows, but that the Red Spider is the only cause of yellows, I must beg leave to doubt. After years of careful investigation, I have arrived at the conclusion that whatever impedes the healthy circulation of the sap of that delicate tree will produce the yellows; and then, generally speaking, death is inevitable, and the sooner the tree is cut down and burned, the better it will be for the fruit grower, as it saves time and trouble.

That the Red Spider is not the only cause of the yellows in the Peach tree can be proved beyond doubt, as all intelligent observers will agree, that whatever cause obstructs the natural flow of the sap, either in the spring or autumn, will produce disease in that delicately organized tree.

The Peach tree, like the Grape vine, is supplied with a redundancy of sap, which pours into the large and tender sap vessels as soon as the first warm rays of the sun thaw the earth and quickens the sap in the roots; every bud swells, and the rushing sap struggles to expand itself in leaves and flowers. If this takes place prematurely, a severe frost follows, the sap freezing bursts the sap vessels, blights the leaf and flower buds, and a general disorganization of the functions of the tree follows. The sap obstructed in its course forms a thousand new channels, shoots out in numerous sickly yellow twigs, and oozes out in gum from every wound or split in the bark, then the tree must die.

The well known *Egeria exitosa*, or Peach Borer, is a fruitful source of the yellows in all the Middle and Southern States. This insect deposits her eggs in the bark near the roots of the Peach tree; the Grubs soon hatch and penetrate into the sap vessels, on which they feed ferociously, gnawing their tortuous paths in and around the roots, cutting off the passage of the ascending sap. For a time the tree shows no signs of the concealed foe; but as the Grubs grow large, and their paths widen, they girdle the tree, the branches then wither, and the sickly shoots in August show that death is inevitable. The Grubs should have been taken out in July; it is too late when the yellow, sickly shoots appear; then cut the tree down, burn it and kill the grubs, or you raise a family of enemies for the next year.

The *Tomicus liminaris*, a minute bark beetle, proves, when numerous, a deadly foe to the Peach tree; this little insect sometimes makes its presence felt rather than acknowledged, as, both in the grub and beetle form it inhabits the bark, and seldom appears in the day-time; its flight is in the night, and it generally spreads from tree to tree, alighting on and infecting those branches and trees nearest the one first attacked: this, it is believed, is the infectious yellows.

A few years since, eighteen trees in my garden were destroyed in one summer by the *Tomicus liminaris*; the eggs were deposited in the sap vessels of the bark, all over the trees, and in one case not an inch of the bark escaped, from the top branch to the root; the irritation was extreme, somewhat analogous to the itch in the human skin. The obstructed, yet stimulated sap threw itself out of every bud in sickly yellow twigs, and the tree died of exhaustion. The disease spread rapidly, and eighteen trees were destroyed before the cause was discovered; they had been carefully protected from the borer, (*Egeria*) and the dark green of the leaves in the spring showed that there was nothing in the soil that disagreed with the roots; the trees were then cut down and burned, and the infectious yellows disappeared from the garden.

When Peach trees have been cultivated for years in the same garden, the soil becomes exhausted of the nourishment that is essential to them; care should then be taken to remove the old soil and replace it with such as is well known to agree with Peach trees. Sickly trees may then become healthy and bear good fruit, but seedlings raised from unhealthy trees will generally prove sickly and die of the yellows.

In the neighborhood of Baltimore, the Peach is cultivated in great perfection and with little care; the soil of that region is rich in mineral salts, such as alum and saltpetre. Does not this lead to the supposition that a judicious mingling of these would be essential in a soil where these minerals are not found? And Peach growers frequently

minge both these salts with common salt, and sprinkle it around their trees, and if the trees are free from insects the result is always good.

If these observations, drawn from a life of experience in the culture of the Peach, can be of service to you, it will give great pleasure to your friend.

A Cheap Grapery.

In the May *Horticulturist*, Dr. G. P. Morris of Wilmington, Delaware, gives the following description of a cheap cold vinery, that seems to answer the purpose very well:

The house is a lean-to, forty feet long by thirteen wide, eight feet high at the back and three feet in the front, with a walk two feet wide and eighteen inches deep in the centre, and a door in each end. The house points south south-east; the back, front, and north sides are made by setting cedar posts three feet in the ground and squaring them on one side, to which are nailed one-inch plowed and grooved floor-boards, making the back and north side tight enough to exclude frost, but sufficiently open to admit some air through the joints in the boards, which I think advantageous. The roof and other end made of hemlock, three by four rafters, between which are one-inch pine strips grooved to let in the glass, which is ten by twelve size, fourth quality; four two feet square ventilators in the roof; and four two feet wide and ten feet long ventilating sash hung on the front plate, together with the two sash doors, complete the ventilation.

The top ventilators are raised and lowered at pleasure by means of an iron rod, which at its lower part is pierced with holes and fastened by means of a nail to the back posts. The border is twenty feet wide, running under the entire house, and extending three feet three inches beyond the front and back, except at one end of the house, where the soil is simply incorporated with wood ashes for the purpose of experiment.

The border is three feet deep, under-drained with rough stones, on top of which are layers of oyster shells, fifty bushels of bones, several cart loads of coach makers' trimmings, leather straps, (thus getting the old horse devoid of the putrid carcass); the top strata consists of the old soil of an adjacent pasture field thoroughly incorporated with well-rotted manure, wood ashes, sand charcoal, and leaf-mold, the which had been prepared a year previously and suffered to be thoroughly intermingled. The border was prepared last autumn. At each end of the house are oil hogsheads, (200 gallons,) from which the rain-water is conducted into the interior tanks, thus having always a supply of soft warm water.

The rough cost was, lumber, \$40; labor, \$50; glass, \$22; hardware, putty, hinges, nails, &c., \$8; making a cost \$120, exclusive of border and vines. It might have been constructed cheaper by avoiding the plane; but being in the immediate vicinity of the dwelling, this was undesirable. Forty vines are planted in this house, thirty-two of the forty being Black Hamburgs, two West St. Peter's, two White Frontignan, one White Nice, one Muscat of Alexandria, one Golden Hamburg. The front row are planted eighteen inches from the front posts, and intended to be trained up fourteen inches from the glass, with the intention of stopping them when they have proceeded half way up the rafters.

The front row will be pruned on the long rod renewal system, i. e., having two canes, allowing one to bear a full crop, then cutting it down to a single eye, staking the crop the next year from the other rod, thus getting the fruit from new rod each year.

The back row will be trained up on vines one foot from the back posts, on the spur system; the front vines being kept in check, and the length of rafter given will prevent shading. This season it is expected to fruit fifteen pot vines, which are now standing on the front border, with the expectation of removal to back border when the front permanent vines may be encroaching, and there allowed to ripen their fruit. To many, this would be an agreeable feature, as the characteristic of the American is to have the fruit the first year. This plan of house is well calculated for pot trees or vines, and was partly erected on account of its correspondence with a proposed house exclusively for orchard culture. The interior has had several coats of white wash, with which sulphur had been intermingled; this and the cost of the posts, which were got out of the woods during winter, are not included in the estimate. A wooden lattice-work is placed at the bottom of the walk. The house, as far as tried, works admirably; the advantage of the two sized ventilators is perceived, as in

cool clear days the small ventilators only may be opened, and as the heat increases the larger ones may be raised. Should more ventilation be thought necessary, sliding doors may be cut in the back walk: for an orchard house this would be required. The house presents a very good appearance; and were another to be erected, no change would be made. To some the pitch of the roof will appear too low; but as we expect during the heated term to keep the glass clouded either by white washing externally, or by the painting to resemble frosted glass internally, we have no fears of the vines burning. The glass is all fourth quality, ten by twelve, and is remarkably good for the price; no better would be desired. A tank for liquid manure water will be an indispensable adjunct, and has been already provided for.

The Apiary—Honey-Comb.

"What well appointed commonwealth! where each Adds to the stock of happiness for all; Wisdom's own forums! whose professors teach Eloquent lessons in their vaulted hall! Galleries of art! and schools of industry! Stores of rich fragrance! Orchestras of song! What marvellous seats of hidden alchemy! How oft, when wandering far and erring long, Man might learn truth and virtue from the bee!"

More than fifty years ago the immortal Huber discovered, beyond a doubt, the mode in which the wax is produced, which is the chief element of the comb. Many old beekeepers now believe that this wax is obtained from flowers in some way or other; or that it is manufactured by some process from bee-bread, which is itself the pollen, or dust of flowers. Huber confined a swarm of bees to a dark, cool room, and at the end of five days they had made several beautiful white combs; these combs were taken away, and the bees supplied with water and honey. New combs were again built; and again and again, and for seven times in succession, and the bees all the while confined to the hive.

It has been calculated that 100 lbs. of bee-bread are carried into a hive in a single season, while all the comb in a single hive of ordinary size, or the wax, rather, weighs not far from two pounds. The Scotch bee-master Bonner had a correct impression of the real source of wax, a long time before Huber made his experiments.

Well then, some are ready to ask, What is the source of the bee wax? Wax is a natural secretion of the bee, as wool is of the sheep. It comes out in delicate scales on the abdomen, and soon after the swarm is hived the bottom-board will be covered with these scales of wax. Mr. Langstroth states—and he is high authority on the subject—that "some bee-bread is always found in the stomach of wax-producing workers, and they never build comb so rapidly as when they have free access to this article. It must, therefore, either furnish some of the elements of wax, or in some way assist the bee in producing it." Every wool grower knows that certain kinds of food will produce more wool than certain other kinds, and yet, any kind of food which will support life will produce wool. The production of wax is governed by the same laws, and the bees may be assisted in its secretion by appropriate food.

Mr. Langstroth says: "Careful experiments prove that from thirteen to twenty pounds of honey are required to make a single pound of wax. As wax is an animal oil secreted chiefly from honey, this fact will not appear incredible to those who are aware how many pounds of corn or hay must be fed to cattle to have them gain a single pound of fat." By this it will be discovered that good comb is worth much more to give to the bees than to melt upon into wax. With the Langstroth hive all straight nice comb can be fastened into the movable frames and given directly to new swarms, and thus save much valuable time.

Artificial comb is now manufactured in Germany by a very simple process—it being cast in moulds in any desired size or shape. In one of the Langstroth observing hives, we have frequently witnessed the whole process of comb building by the bees, though it is usually carried on with the greatest activity by night, when the bees are all in and can do nothing else; and also when the weather is unpleasant without the combs are rapidly constructed. Then when the favorable moment for honey-gathering arrives, there is room to store the precious sweet away. When the honey season falls, comb-building ceases.

The size of the cells in which the working bees are reared varies so little as scarcely to be discovered by the most careful measurements. The figure of the cells is six-sided. Dr. Reid says, "There are only three possible figures of the cells, which can make them all equal and similar, without any useless spaces between them. These are the equilateral triangle, the square and the regular hexagon. It is well known to mathematicians that there

is not a fourth way possible in which a plane may be cut into little spaces, that shall be equal, similar and regular without leaving any interstices."

As neither the triangular or square shaped cell could answer the purpose of rearing the young bees, and as a circular shape would have caused much waste room, the hexagon, being nearly circular, combines all the advantages of the circle and saves all the room.

The Apiary in May.

The increase of bees is now very rapid, and the drones have made their appearance. We judge that swarms will issue early this season. Bees are gathering honey and bee-bread, and if the lower boxes or hives are full, they should have easy access to the honey receptacles or drawers. Should several days of unpleasant weather occur, bees ought to be fed if it can be done, so as to not draw other bees by the smell of honey. Young swarms that issue in this month ought always to be fed. With the Langstroth hive this can be done effectually, and outsiders know nothing about it. Hives must be got in readiness and all joints filled in with a mixture of one-third bees-wax and two thirds rosin melted together. Those who have the Langstroth hive may effectually prevent new swarms leaving for the woods, by taking from the hive from which the swarm issued one or two frames of comb, and putting into the hive intended for the new swarm.

A Vine Growers Convention.

The Aiken Horticultural and Vine Growing Association of South Carolina have issued a circular in which they propose that a convention of the vine growers of the United States should meet at Aiken, in South Carolina, on the 21st of next August. The circular suggests that it is necessary to come to some understanding relative to the names of many kinds of grapes which are now known by several different names, according to the locality in which they are grown. Another point is that it is desirable to determine upon some manner of naming the different wines. The present way of calling them by the name of the grape is in direct contravention to the established rules of wine growing countries. It has also been customary to classify wines by the name of a State, Province or District, with the different brands attached to them, according to the name of the different locality. Thus the general names "Wines of the Rhine" comprises many particular brands, such as Hockheimer, Johanneberger, &c. Bordeaux wines include Chateaux Margaux, St. Julien, La Rose, etc. The reason for this is very obvious. The same grape will make totally different wines in different places. And again, in most wine countries, (and we will no doubt adopt the same course) the grapes are mixed. A wine made from the mixture of Catawba, Isabella and Warren, could not be called by either of those names. At present we have a hundred different Catawba Wines, no two of them alike. Hence, the propriety of rejecting the name of the fruit in favor of the time honored custom of naming after the State, District or River, with brands of private names or localities. Purchasers will then know at once what they are buying, and will not be prejudiced against Catawba or Warren wine, because they have tasted worthless Catawba or Warren wine.

HORTICULTURAL NOTES.

The Currant.

It is noted in an article on the currant read before the Monroe Farmers' Club, that cutting the eggs out of the fruit at an early season of its growth, after it has been punctured will save the fruit. This plan is not without its drawbacks: in the first place it is a very tedious process, and would have to be followed up day after day, during the insect season, when it would be found that many of the fruit would be almost stripped of their skins by the time the operations were completed. Again, when the fruit is thus wounded, it gums where the knife has been applied; the fruit itself does not fill out well, and in many cases the operation causes decay. The fruit that is saved by this process is of little value. The true method is the sheet, mallet, and scalding water process. This finishes the insect and prevents more eggs being laid.

The Negly Pear

Is the name of a pear which was thus named by the fruit committee of the Pittsburgh Horticultural Society. The original tree is yet growing in Pittsburgh. The fruit is there considered very fine, bringing the highest price in the market. Chas. Downing writes that it is the most beautiful pear he ever saw. A full description and history is given in the May *Horticulturist*.

Suggestions on Dwarf Pears.

C. M. Hooker writes to the *Horticulturist*, "we need very much a list of the pears cultivated in this country, classified under the head of 'those which do remarkably well on quince,' 'those which thrive moderately,' and 'those which should not be dwarfed unless double worked.'" Of 86 varieties which he has planted, 96 are reported as doing well.

Some more Remarks about Thoroughbred Horses and Breeding.

Private speculation has triumphed over all the obstacles from the acts of Parliament of Anne and George II.; and with the trivial assistance of thirteen royal plates in 1745, now increased to 5,000 guineas for the three Kingdoms, something less than the tax annually levied on the race horses, which, in 1859, amounted to £5,824.

In France they order things differently; for, in addition to liberal prizes, the Government has purchased our best stallions, whose services are given to the public at a cheap rate.

If in this country we pursued the later policy, we should deteriorate our breed, because it would induce persons to breed from ordinary mares with a view to obtain a valuable marketable article by a crack stallion.

The first-class horses would be overworked, and an inferior animal would be the natural production. I suggest to gentlemen, when they talk of the incapacity of our modern race-horses to carry heavy weights, to look at Touchstone, West Australian, Stockwell, Raptan, King Tom, Surplice, Longbow, and twenty others. They are strong enough to carry fourteen stone to bounds. A century ago, race-horses were described as Barb jennets, about the average of fourteen hands two inches, obliged to run four, five, and six miles under heavy weights. We should consider them and placing them on the footing of our Barbs and Arabians, only fit to carry seven stone, and half a mile a sufficient scope for all their racing powers.

The feelings of modern sportsmen prompt them never to abuse a good horse. A man must be very unwise to run or match a horse four miles at heavy weights, when he can carry on the war a shorter distance at light weights. A good jockey never runs a horse under such disadvantages, except from very sordid motives, and in the olden times there was a strong party adverse to such an onerous system.

Take the best race horse in England, hunt him for two years, with twelve stone in deep country, and you can never afterwards make him race with a £50 plater. It is the same with man; a heavy weight carrying porter has no speed in running; and even Tom Sayers would lose his quick hitting if, for two years, he worked as a coalheaver. A heavy strain on any muscle makes them rigid.

With respect to breeding, try to combine shape and make; that is to say, when on the mare's side there is a deficiency in any particular point it would appear wise to select a stallion very good in that peculiarity, and then to look out for a distinctly opposite cross of blood.

I attribute the great growth and size of the present thoroughbred horses to the care that is bestowed upon them in early life. They have bruised oats as soon as they can use their teeth. They are well housed and well fed till they are taken into the racing-stable. If in early times race horses had the advantage of not being trained before they were four years old, good oats were parsimoniously bestowed upon them. A majority of young horses were ruined by the severity of their training to run long distances, and by the ignorant abuse of medicine. I have been told by old racing friends that in a large stable it was a matter of congratulation if no horses were killed by physic during the spring and autumnal preparations; and I can recollect the time when fresh air was carefully excluded from racing stables, even to the extent of placing straw under the doors and stopping up the keyholes. The disease of roaring was thereby engendered, and blind horses were very numerous.

The modern system is to take up the yearlings in August; back them in September, to get them steady and go straightforward in October; and to try all the moderate-looking ones once or twice before the end of December. The large and promising yearlings are kept backward in condition, as it is presumed they would have a great disadvantage in early trials with small and well furnished fillies, which might lead to great mistakes in the following year, besides the probability of injuring them by premature work and exertions. The object of these trials is to obtain the choice of selections in naming for the stakes which close early in January. And there is another equally important discovery to make, viz: how many of the lot are worth keeping on in training at £2 per week. This system of early training, so abused by sportsmen unconnected with the Turf, is painfully forced upon the owner by a calculation of £. s. d.; by which all the world is governed. And it must be recollected, that a two-year-old whose growth has been forced by good food, as fit to go into work as a three-year-old,

reared on grass and hay. Many mistakes are made by not preparing yearlings, and engaging them deeply, owing to their size, good looks, or promising action in their slow paces. It is the best policy to try a young horse when—to use a trainer's expression—"he comes well to hand." Too often he turns out an impostor; and when the trial takes place the golden vision fades. The trainer's bill and heavy forfeits stand out in strong relief. There is no business in life in which it is so indispensable to ascertain the truth respecting the merits and demerits of every horse in your stable; and when a racing man is too nervous to try his old and young horses before they appear in public, he is a long way from being a sage.

Thirty years ago trainers always took out their horses to exercise twice a day, from March to October, both months inclusive; in the middle of summer they were out at sunrise, when the dew was on the ground; their work was finished, and the stable done up by seven o'clock. They were again walked out at five or six o'clock, P. M., according to the heat of the weather, whilst the stables were cooled and ventilated before the horses were settled for the night.

Our modern trainers are out, on a summer morning, at six or seven o'clock, and remain out until nine or ten o'clock, generally about the hottest part of the day, and the horses rarely are taken out again in the cool of the evening. All this is in utter violation of common sense.

The American trainers wisely adhere to the old practice; but they astonish our natives by exposing their horses stripped in the middle of winter for seven or eight hours during a period of four weeks to harden their constitutions; and, as far as we can judge from the running of Mr. Ten Broeck's horses last spring, the system is not detrimental to them. This last trying winter the only horse in the stable which was not so exposed was Umpire. He alone has suffered from a cough; and I believe his exemption from the ordeal of exposure was owing to the solicitations of English prejudices.

In English stables there is an old and foolish habit of restricting the horses to two drinks of water in twenty-four hours—a painful when they return from exercise, and another painful when they are made up for the night. It they had constant access to water they would not overload their stomach at stated intervals to the detriment of their wind. The American trainer, with better judgment, allows his horses to drink water eight or ten times in the day in small quantities. Then, with respect to food, the Americans give their horses undergoing the last preparation, maize of the best quality mixed with the oats. Our trainers say, "I want nothing for my horses but good oats and hay." Horses are like ourselves—they enjoy a variety; and when they are in strong work, pounded maize, split with peas and beans, and Thorley's patent food may be introduced with great advantage; for a delicate horse steamed barley, bruised oats add fifteen per cent. to the nourishment of a horse with a weak digestion. Wise men never throw away a chance.

Although a most radical change has been effected in ventilating racing stables, a great improvement might still be made. In the summer, windows ought to be kept open night and day, the doors removed, and a substitute of bunting on framework. In the winter the ventilating holes should never be plugged up, which I observed to be the case in most stables. If the weather is cold and changeable clothe your horses as you please, but fresh air is indispensable to preserve their health.—Take a roarer out of an ill-ventilated stable, and train him from an open box, with water always within his reach, you will improve his strength, his wind, and his condition a stone. In the first position, he suffers like a man with an asthma in a crowded room. In an open box during the racing season, no weather will hurt him if he is well clothed, and his legs bandaged, plenty of litter, and not exposed to rain. Unseasonable hot weather produces coughs, where stable windows are kept close. A sharp frost sets them all right, and is more beneficial than "Cough no more Lozengers."

There are not many men in England who can train horses scientifically, although every head groom, brought up in a racing stable, flatters himself he is fully prepared for the task. The cleverest trainer in England said to me last year, "I have trained horses twenty years, and every year I discovered a weak point, and that I have a great deal to learn."

No three horses require the same work, the same food, and the same physic; their wants and requirements ought to be the serious study of the trainer. How often we see a heavy lad on a hard pulling two-year-old, and a light weight on a lazy old horse, galloping a mile and a half together, without any calculation being made as to the result. The cleverest trainer ought not to take charge of

above twenty-two horses; it is impossible that he can do justice to a greater number, considering that every horse's legs and feet ought to be well inspected twice a day, with an eye to the manger every time they are fed. Therefore, in the great public stables, where sixty or seventy horses are kept, the great man pays especial attention to the six or seven most promising or notoriously good horses, like a head schoolmaster, who takes pains with the clever boys, who may turn out a credit to him, and allows the ushers to brush up the slow coaches as they please. There is nothing so detrimental to racing as these large stables. Three private establishments, averaging ten horses each, will make more sport than a public stable containing seventy horses.

It may appear very extraordinary, but I must repeat it, there is no greater enemy to handicaps than myself. There is too much power given to an individual; if he is a clever man and a rogue, he can make a present of the stake to any man who may buy him.—Handicapping is, therefore, the black cloud which will some day most materially injure the turf, and venal handicappers will be the agents of destruction. Handicapping was originally solely employed in making matches. The name is derived from the practice of parties (whose horses were selected to run a certain distance at specified weights) keeping their hands closed in their hat or cap. When called upon by the person appointed to regulate the weights to take their hands out and open, money in the hand was acceptance; no money, a negative. Now, in lieu of a hat, when we make matches, we use our pockets. The first handicap sweepstakes of any importance was the Oatlands, and Newmarket, which was divided into three classes, and the winners of the three classes ran again for the forfeits.

The especial purport of a handicap is to level all distinctions; a dead heat between the top and bottom weights is the climax of perfection. Therefore it is a positive boon for bad horses, and the chief inducement to keep a parcel of wretches in training. The higher you make your standard of weight, the more it acts to the detriment of first-class horses, because, if you put your minimum at seven stone, you are obliged to raise the cracks to walter weights, which must injure or break them down in a long course. Men who are not gifted with brains are captivated by the nonsense, "It must be a poor horse which cannot carry seven stone." All horses can carry seven stone. If, in a handicap, it should be a damper to a three-year-old, the weight has no terrors for an aged horse; therefore we should be persecuted by miserable old platers and steeplechase horses. It would be the greatest inducement of Nimrod to keep their wretches in training; and, at the same time, it would put all the first class horses out of court, because on such terms owners of good horses would not risk them without something more than a fair prospect to win the race.

A handicap is a game of weights which will equalize the speed of any animal. The greyhound, the pointer, the spaniel, might be brought to a dead heat half a mile by weighty collars. Non-racing men would say that if a slight thoroughbred horse was matched against a cocktail at 13 stone and 5 stone, that the former was overweighted. The answer to that would be "the result." If the heavy weight won the race, the cocktail, in racing parlance, we should say was overweighted, and the former underweighted.

In the United States four mile races and heats are encouraged, but very seldom above three or four horses start for the prize. In this country heats were abolished by the universal consent of every humane gentleman.—In 1851, the Jockey Club recommended Her Majesty's Master of the Horse to abolish heats in the Royal Plates; they have not been sanctioned, consequently, since 1853. If we wish to preserve a race horse in the highest state of perfection, no person, unless he is extremely fond of money, would run him four miles with 12 stone on his back. We have no wish to retrograde to a barbarous era or to destroy our magnificent horses with oppressive weights.—ADMIRAL ROUS, in *London Field*.

S. D. Bruce of Lexington, Kentucky, has nearly completed the stud book which he has in preparation, and is desirous of having all those who have broodmares furnish him with a list of their produce and the names of their owners at a very early day. The stud book that Mr. Bruce proposes to issue, from what we have read concerning it, will be in reality the best work of the kind that has been got up in the United States, worthy of the name.

The Waters Steam Plow at Work.

Mr. James Waters, the inventor of the steam plow, as we announced some two months ago, took his machine to Illinois to perform some contracts for plowing which he made during his visit to that State last fall. The *Prairie Farmer* of last week gives us the following account of his success. It is worthy of note, that whilst the Fawke's steam plow was heralded forth as the greath invention for prairie plowing, and was awarded the premium at the United States fair, it has not as yet gone into the real actual business of plowing, whilst Waters with his machines has not only made the machine, but is doing the actual work at a cheap and economical rate, making it a business to plow by steam. We consider Mr. Waters by every will of practice and theory has thus done more for the State of Illinois than any invention yet shown, and is the person who was fairly entitled to the award. The editor of the *Prairie Farmer* says:

We visited Minooka, in Grundy county, last Friday, in order to observe the working of Waters' Steam Plow in breaking prairie, and will tell our readers what we saw there. On our arrival at Minooka, we learned that Mr. Waters was at work. In company with Mr. L. Smith, who kindly volunteered to take us to the field, we left the station, going north, and passed over a field of forty acres which had been broken by Mr. Waters with his plow. This was his first work. His plows not having been well finished up and polished, the breaking in this field was somewhat rough and broken, but altogether, was very well done. The undulations in this field were considerable, giving both an up and down grade, thus testing the capacity of the machine in this respect.

Passing this ground, and ascending a high roll of the prairie, we caught sight of the plow in the distance, traveling leisurely across the prairie, drawing its gang of six plows, cutting a furrow nine feet in width. The scene was grand and exciting. As we approached the machine, we found Waters quietly guiding it, with none but the necessary attendants about him, and thus practically testing its ability and power before seeking to place it prominently before the public. We noted down the operation of the machine while we were with it. From a given point it traveled twenty-three minutes; stopped six minutes for wood; ran thirteen minutes, and stopped nine minutes for water; then ran nineteen minutes—making fifty-five minutes running time and fifteen minutes stoppage. Had the man whose duty it was to furnish wood and water, performed that duty as he should, and could have done, he would have saved at least five minutes of this time. Estimating the ground plowed as nearly as we could without actually measuring it, we found that during seventy-two minutes (including stops) he had plowed 2 63-100 acres. That the machine can plow at this rate through the day without interruption, is not to be expected, in its present condition. The day previous to our visit Mr. W. plowed twelve acres with it. The plows had been put to some very severe tests in a field full of small oak and hickory stumps or "grubs." These were cut off without injury to the plows, and apparently without effect upon the engine. We measured one of these hickory roots which had been cut through; its diameter was 4 1/2 inches.

In this trial Mr. Waters used but six of his gang of thirteen plows. His traction power seems sufficient to draw them all, and when some more convenient mode of handling and managing them shall be adopted, he thinks he will have no difficulty in using the full gang.

As the machine is now arranged, it requires one and a half cords of wood, a hand and team to supply fuel and water, (the water in this case being a half-mile away) a fireman, two men to manage the plows, beside Mr. Waters—to which add oil, &c., and Mr. W. says the cost to him is less than \$9 per day.

James Waters, the inventor, deserves more than a passing notice—more than our space, and the data in our possession will permit us to give. Naturally very retiring, he has worked quietly and almost unknown. His mechanical talent and judgment are of a superior order. So complete were his plans perfected in his own mind, that within three months from the time the first blow was struck on his machine in Detroit, he drove it into the United States Fair Grounds in this city, amid the shouts of the assembled thousands. It there demonstrated its enormous power, in turning over a furrow twenty feet wide and from six to eight inches deep, with its monster gang of thirteen plows attached. Unfortunately, before it could be tested by the Committee, some portion of the plows

gave way and prevented a thorough trial.

Not at all disheartened, Mr. Waters repaired up, and visited the Central portions of the State, exhibited the plow in operation, and finally returned to Detroit, where, during the winter, he has made some slight alterations; and additions to strengthen and improve it, have been adopted. He now appears, unannounced, on our prairies, to claim what he has won—the honor of being the first man in America who has made a practical and paying demonstration of plowing by steam.

Up to the time we left Minooka he had plowed about seventy acres, and is now engaged in a large job of prairie breaking, for which he is paid by the acre. It is his purpose to continue the work with his present machine, until he shall have established by experience what improvements are necessary, or may be made, in order to render his invention perfectly adapted to the wants of Western agriculturists. These once fixed upon will be adopted. He now thinks he has learned something which will prove profitable; we doubt not he has. We shall look to see the results of his experience demonstrated.

The U. S. Census.

On the first of June, the work of taking the seventh census of the United States will have commenced. It is desirable that it be taken with great accuracy, and to enable the Assistant Marshals who will be engaged in the performance of this duty to have their work well done, it has been suggested that the publication of the questions necessary for all heads of families to answer, would be of great benefit. With this view we publish the following list which we believe to be correct.

That the correct population of States may be known, as well as the various subdivisions, it is absolutely necessary that the name of each man who resides in the family on the 1st of June, be noted.

The age of each, sex and color, whether white, black, or mulatto.

Profession, occupation or trade of each male person 15 years of age.

Value of real estate owned.

Place of birth, naming the State, Territory or country.

Married within the year.

Attended school within the year.

Persons over twenty years of age that cannot read or write.

Whether deaf and dumb, blind, insane or idiotic, pauper or convict.

Name of owner, agent or manager of the farm.

Number of improved acres.

Number unimproved acres.

Cash value of farm.

Value of farming implements and machinery.

Live stock on hand June 1st, 1860, viz: number of horses, mules and asses, working oxen, milch cows, and other cattle, swine and sheep.

Value of live stock.

Value of animals slaughtered during the year.

Produce during the year ending June 1st, 1860, viz: number bushels of wheat, rye, Indian corn, oats, beans, peas, buckwheat, barley, Irish potatoes, pounds of wool and pounds of tobacco.

Value of ore-land products in dollars.

Gallons of wines, value of produce of market garden, pounds of butter, pounds of cheese, tons of hay, bushels of clover seed, and bushels of grass seed, pounds of hops, pounds of flax, bushels of flax seed, pounds of maple sugar, gallons of molasses, pounds of honey and beeswax, value of home-made manufactures.

Name of Corporation, Company or Individual producing articles to the annual value of \$500.

Name of business, manufacture or product.

Capital invested in real estate and personal estate in the business.

Raw material used, included fuel, viz: male, female, average monthly cost of male labor; average monthly cost of female labor.

Annual product: quantity, kinds, values.

Names of every person who died during the year ending June 1, 1860, whose usual place of abode was in the family, the age, sex and color, whether white, black or mulatto, married or widowed, place of birth, State, Territory or country, the month in which the person died, profession, occupation or trade, disease or cause of death.

In addition to these, there are a number of other questions, the answer to which can be obtained now even with little trouble. It is hoped that every person who sees this request will, before the first day of June, make out the answers, and in case of absence, leave it in such a place and condition that it may be placed in the hands of the officers when they call for it.

By the act of Congress "providing for the taking of the seventh and subsequent Census of the United States, and to determine the number of the members of the House of Representatives," etc., approved May 23d, 1860, provides, Section 17, "that the Marshals and the assistants are hereby authorized to transmit through the post office any papers or documents relating to the census," and subscribing the same, with the addition to his name of Marshal, or Assistants as the case may be.

That no unnecessary delay may happen to communications addressed to the United States Marshals in reference to taking the census, the press will do a service by the publication of these facts, for the information of postmasters throughout this State.

NEW ADVERTISEMENTS.

W. SMYTHE FARMER, Berrien Springs, Mich., Prophet and Lone Star.
HARRY SHIRLS, Pittsburgh, Pa., St. Charles Hotel.
A. M. ANGUS, Flushing, Mich., Magic Copying Paper.
M. S. & N. I. R. K., Grand Excursion.
S. BULLOCK, Columbia X Roads, Pa., Gladding's Horse Pitch Fork.

FARM FOR SALE.—The owner of a magnificent farm of 210 acres, located in Macomb county, a few miles from Rochester, in this State, is desirous of selling it. The farm itself has a fine large dwelling, horse barns, large barn sheds, carriage house, piggery, orchard, and garden. It is all cleared but about 30 acres, which is in wood; is well fenced, and under first rate cultivation. With the farm will be sold the stock and implements, which are all in good order, and comprise cattle, sheep and horses, together with the wagons, &c. used upon such an estate. The terms will be made easy.
For further particulars apply to R. F. JOHNSTONE, Editor of the Michigan Farmer. 17-47

MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

SATURDAY, MAY 12, 1860.

Editorial Miscellany

It will be seen by her letters that the Lady of the Household has taken advantage of the courtesy of the Baltimore and Ohio Railroad Company, and gone abroad. After six years unremitting and incessant labors, in the performance of duties connected with the business and publication of the FARMER, as well as in writing for its columns, the visit to Washington and Mount Vernon, a part of the description of which will be found in this paper, is a first relaxation, which has been fairly earned, and seems to be enjoyed as fully as it was deserved.

It will be noted that W. Smythe Farmer has been introducing into Berrien county a very well bred horse of the Black Hawk family with a strong cross of the Hamiltonian and Messenger strain. We are informed that his yearling colts display fine size and action. For a fuller description of this horse "Prophet," we refer our readers to his advertisement.

The inventor of the patent hoisting hay fork which was exhibited at the fair ground last year, and with the operation of which every one was pleased, it will be seen offers to fill orders for them immediately. The terms will be found in his advertisement. Any of these orders may be sent to us, and we will forward them. The fork is a most useful article, and will save its price in the getting in of a single crop.

Messrs. F. V. Smith and Co. of Coldwater have already paid their entrance fee to the National Horse Show at Kalamazoo next September, and entered Magna Charta for the one thousand dollar premium; and besides this they have made the offer to put up one thousand dollars more, if parties who make like entries will do the same. Should there be three entries, the amount to be trotted for would be four thousand dollars. Where are the challengers who were anxious to hear from Magna Charta some time since? Here is a favorable opportunity to come to Michigan, and find out what a Michigan horse can do. We hope to hear from I. Woodruff, and some others who seemed anxious last winter to have a trial of their horses.

Messrs. Voorhees, Dibble and others started from Marshall last week with a thousand head of Spanish merino sheep for Texas. These sheep have been selected from some of the best bred flocks in the State, and are intended for the Brazos River Valley. By a communication which will be found in another column it will be seen where the sheep were purchased, and the names of the owners of the flocks from whom they were selected. It is only two years since we were shown at Mr. Starkweather's one or two of the original Spanish stock which he purchased of the first importation, and that gentleman has now in his possession the original Spanish certificate of pedigree, certifying that the animals which they accompanied to this country were of the pure "blue blood," and every one a Hidalgo of the first rank.

We publish the pedigrees of some Herefords this week to which we call attention. Mr. Bowen informs us that he has some of his stock for sale now, which he would part with on reasonable terms. To parties who would like to cross with the Hereford, and obtain some of their quality, this is a favorable chance. It must be remembered that the Herefords are the great English rivals of the short horns, and though not possessing many of the qualities which render the latter so fashionable and so much desired, they have qualities of their own, which are considered valuable enough to place them alongside of them, and in the estimation of their breeders to make them superior as a paying breed. The Messrs. Bowen keep a large dairy, and find their stock as valuable for milk as any.

The Monroe Farmer Club held their first monthly fair on the last Saturday of April. From a report of the stock and arti-

cles brought forward, for exhibition as well as for sale, we note that a very praiseworthy effort was made to give this stock fair a good start by the farmers of the vicinity. There were few sales effected, many not being appraised that stock would be offered for sale, and others being deterred by the blight that had fallen on the Tecumseh bank bills, of which there was a large circulation in that county previous to the stoppage of payment. We received from E. G. Morton, Esq., a most cordial invitation to be present; but though received at our office in time, it was not seen by us at a date that would permit us to accept. We hope, however, to be present at the next fair, if business will possibly permit us to leave. Such meetings or fairs as the Monroe farmers propose to establish, can only be maintained by the common consent and united action of the community, and when once their utility is established by custom or habit, of attendance, they will then work their way into successful practice. The Tuesday and Wednesday cattle market of New York and the Monday market at Albany have now become settled customs. It is but a few years ago when there were no such market days. Now they are found a great convenience by all parties interested in the purchase or sale of live stock. Once let the farmers of Monroe or any other county become firm in their determination to bring in their stock for sale once a month, and the purchasers will readily adopt themselves and their business to that time. But the great difficulty is to get the farmers themselves to adopt any settled habits, they are too much used to the "largest liberty" of action, and seldom conform to any new habits, without they are absolutely pinched into them.

For Chicago.

The various railroad lines are preparing to make the trip to Chicago, for the various delegates, and all the multitude of numerous outsiders, a pleasure excursion. The Michigan Southern, the Michigan Central and the Detroit and Milwaukee Railroads have each issued their programme. Half fare tickets to be good from the 16th to the 31st. The card of the Michigan Southern will be found in another column. The convention will unquestionably be a great gathering, and parties well posted have no hesitation in saying that Michigan alone will turn out between five and six thousand visitors to the prairie city. The interior of Illinois will furnish twice as many, and when Indiana, Ohio, Wisconsin and Iowa pour out their hordes, we expect to hear that Chicago has been taken. From what we know of New York, it will not be too much to say that the Empire State will send out on this momentous occasion a host as terrible as the "army in Flanders."

Political Notes of the Week.

The convention of seceding delegates at Charleston, previous to adjournment, adopted a resolution to meet at Richmond on the second Monday of June, and also providing that an address be prepared and published setting forth the grounds on which the action of the seceders is based.

The Legislature of California have passed a bill providing for a vote of the people on the question as to whether the constitution of the State shall be amended by a convention to be called for that purpose.

The Republicans of Illinois have held their State convention and have nominated Richard Yates of Morgan county for Governor and Francis A. Hoffman of Dupage county for Lieutenant Governor. The proceedings were prompt and unanimous.

The Hon. Jacob M. Howard, the present Attorney General of the State, declines to be put in nomination for that office again. When his present term expires he will have been the chief law officer of the State for six years.

A meeting has been held in New York recommending General Houston as a candidate for the Presidency.

The Mexican treaty has been amended, and will again come up before the Senate for consideration and approval.

Congress has been very quiet since the return of its members from the Charleston convention, and business has been progressing. Much time has been totally occupied with the passage of bills and the consideration of subjects relating to private or personal business. We note that the Senate has agreed to a resolution to have the government coast survey aided in making observations connected with the great eclipse of the year. In the Senate we note that the discussion as to the right reading of the Cincinnati platform has been introduced and is to be debated. Mr. Douglas proposes to discuss this matter and is to reply to Mr. Davis. This speech will probably be canvassed with great earnestness, and will be the basis on which Mr. Douglas will go before the adjourned meeting of the democratic national convention at Baltimore. In the House of Representatives the revision of the tariff is the chief subject of discussion. Very little is definitely settled in relation to it, though there are strong opinions expressed relative to the inefficiency of the present law either for revenue or as a means of promoting in any degree the business interests of the country. The Covode committee is on a new track, and is busily hunting up the source of the oil that greased the

screws that were applied to the Kansas Lecompton constitution. The interminable Wendell seems to have something to disclose in this business, some thirty or forty thousand dollars it is claimed passing through his hands in this operation as far as known.

The National Union Convention has met at Baltimore, and organized. Mr. Erasmus Brooks of New York, seems to be the chief actor in the convention. Delegates are present from twenty six of the States. Washington Hunt of New York was made temporary chairman; J. J. Crittenden was present. J. M. Botts, Leslie Coombs and a large number of men distinguished "long ago," and whose name are almost "household words," to those who took part in the fiery campaigns of 1840 and 1844, are members. This organization presents a more respectable front than any organization of the kind that has yet been got up, and as a party round which the opposition to the administration may rally in the southern States, it seems calculated to be effective, but when the leading members propose to lay down a platform which shall ignore all reference to slavery, and the question incident to that institution, they show themselves men of the past who would if possible obliterate in the waters of Lethe the eventful record which twenty years have stamped with ineffaceable characters not only on the history of the country, but what is of more importance, in the minds and hearts of the generation that have grown up during that time, and who have had opportunities of observation for gaining knowledge and experience, such as no other twenty years has ever presented in the history of mankind. Utopia does not exist in experience of the past. The gilded domes and gay minarets of its cloudland States, are ever glittering in the future. This Baltimore organization is likely to exert a controlling and it may be a useful conservative influence on both parties, and probably, may do much good. Unquestionably many of those who take part in it, are actuated by the highest patriotic views, and are anxious that their influence should be concentrated in such a manner as must be felt. That they will nominate candidates for the presidency seems to a settled fact. The names most prominent before them are John Bell of Tennessee and Samuel Houston of Texas. Either of these names might be the means of making a third candidate, who would receive votes enough, and even States enough to make the contest of 1860 a remarkable one.

The nominations have been made with remarkable quietness and unanimity. John Bell of Tennessee and Edward Everett of Massachusetts are named. These candidates stand well everywhere, and will undoubtedly command the sympathies of very many; they will stand a good chance to rally them a strong old whig vote in the south. It may operate in some degree to carry some votes at the north, but the experience of 1848 and 1856 do not give much encouragement.

Foreign Events.

The English papers have not yet got over the excitement of the pugilistic combat. There is as yet nothing definitely settled as to the result, except that there is a desire to make it a drawn battle. To this Heenan objects in a letter to the London Times, in which he says he has come three thousand miles to win the belt; and that having won it, he wants it, and if Mr. Sayers or any one else wants to get it back, let them come and take it from him. It is not probable that the friends of either party will permit another combat. The House of Commons have had the subject of such events before them, and it is therein declared that all persons present at such assemblages are illegally engaged, and liable to prosecution. The law seems to be stringent enough, but the community do not put it in force.

The British Parliament are now debating the reform bill. The Savoy question remains in abeyance for the present in England.

A cashier of the Union Bank named Fallinger, has done the defaulting business on such a wholesale scale, that the press says he is at the head of that class. The frauds he is estimated to have committed are placed at the enormous sum of one million and a quarter.

The spring is considered backward in Great Britain, and some fears are entertained that the coming grain crops will be light.

There seems to be a general impression that a congress will be held at Paris to consider the Swiss difficulty, and to arrange matters with reference to that part of Savoy to which she lays claim. Meanwhile the vote in Savoy has been so overwhelmingly in favor of annexation to France, that no congress or single power will be likely to interfere. Even in the district of Chambery, to which the Swiss affirm the most particular title, the votes in favor of annexation have been overwhelming to all opposition.

ITALY.—The King of Sardinia continues a sort of triumphal visit throughout those portions of the provinces that have been recently annexed, and is everywhere received with even more than Italian enthusiasm. It is said that at the suggestion of France he has laid aside the design of assuming for the present the title of King of Italy, as it might lead to unprofitable discussion. It is probable however that this design will be resumed when the fruit is ripe and more ready to be plucked. The most extraordinary event is the fact that the Count of Syracuse, uncle to the King of Naples, has signified his intention of tendering all his influence and even his sword to Victor Emanuel in case of a revolution in the Neapolitan dominions, if the constitution of 1848 is not restored.

In Spain, the attempt at revolution has been put down, and the Count of Montemolin, the pretender to the throne, with his brother have been seized and are to undergo trial. The Plenipotentiaries from Morocco are on their way to Madrid to negotiate the treaty of peace between the two countries, and it is thought peace will be permanent. The Austrian government as yet have done nothing to quiet the state of discontent in Hungary, and the letters patent recently issued by the Emperor, instead of doing good have only created a greater mistrust.

Some of the European correspondents seem to

think that peace is very far from being assured, and that at no very distant day war on the continent must break out again. The only hindrance to it at present on the part of Austria, so far as we can see, is the want of money. Her finances are in a most wretched state.

Literary Notes and News.

We are indebted to the H. N. D. W. Leach for a copy of Morrell's bill to amend the tariff.

The first number of the Dairy Farmer has been received. It is published at Little Falls, Herkimer county, N. Y., by A. W. Eaton, and is to be devoted to promoting the interests of the dairy in all its departments.

"Milk Cows and Dairy Farming," by G. L. Flint, secretary of the Massachusetts Board of Agriculture, is a treatise on the breeding, selection and management of dairy stock, with a full explanation of Guenon's method of selecting cows; also a description of the diseases of cattle, and of the management of milk, in butter and cheese dairies, including the modes adopted in making the most celebrated varieties of English, Dutch and Italian cheese. There is also very much other information relating to cattle and the dairy in this volume. Every one who makes the dairy a part of his business will receive useful hints from this volume. The Appendix recently added to the new addition contains information on the cattle disease which has assumed such a formidable aspect in Massachusetts.

The May number of All The Year Round has been received from the publishers, Messrs. J. M. Emerson & Co. This number concludes the half yearly volume, and contains the last Christmas story of Dickens in addition to its usual contents, which are as usual excellent. This periodical with the United States Journal is furnished at \$8.50 per year, and a copy of that splendid engraving of Rose Bonheur's horse fair is likewise sent.

The American Journal of Sciences and Arts, published at New Haven, Ct. for May is just issued, and contains a variety of papers on scientific subjects, with a general summary of valuable information on the progress of the sciences and proceedings of scientific bodies abroad and at home.

General News.

The Rev. Mr. Harden of New Jersey, who has been on trial for poisoning his wife, has been convicted and sentenced to be hung.

Two new dillies have been started in this State; one the Expressor at Adrian, by S. P. Jermain & Co., and the other the Telegraph at Kalamazoo, by H. E. Haeckel. Both are republican in politics.

Judge Wells of Kalamazoo has entirely recovered from the injuries he received on the railroad a short time ago.

The proprietor of the Mackinaw Herald is desirous of selling that establishment and advertises it.

The importation of Spanish jacks and jennets into Kentucky, which we mentioned some time ago, has been made and the stock all received in good health.

Several bodies of the lost on the Hungarian have been picked up within the past few weeks on the shores where the vessel was lost. The bodies have been so mutilated, however, that they have not been recognized.

Preparations are being made for the reception of the Japanese embassy at New York. The Powhatan is to land them at Hampton Roads, from whence they will be conveyed direct to Washington. They are afterwards to visit New York, where the Messrs. Leland are preparing the Metropolitan Hotel for their reception. The U. S. steam frigate Niagara is also being fitted up and is to be put at their service to take them to Japan from Panama, when their visit is over.

Efforts are being made at the east to raise capital to construct a balloon for a voyage across the Atlantic. Experiments demonstrate that the currents of air eastward exist and can be taken advantage of.

Two boys named Bolton ran away from their home in Livingston county last week, and were found by their father in a sailor's boarding house in this city, where they got rather harsh fare. They were glad enough to go home, and we think they won't try city life again in a hurry.

An officer named Clancy who attempted to seize a disorderly teamster while running his horses to get away, got kicked by one of the team so severely in the face that he has since died.

The pony express from San Francisco proves to be quite an institution. It arrived at St. Joseph, Mo., from San Francisco in nine days and four hours, the last 120 miles being traveled in eight hours and a half.

It is estimated that nearly fifty thousand persons have gone to the Washoe mines. As a matter of course there is great suffering there.

The counties of Guernsey, Belmont and Harrison, in eastern Ohio, have been visited by showers of meteoric stones and a severe shock of earthquake.

A boy named Macklem fell into the Niagara river at Chippewa and was carried over the Falls.

Samuel Beardsley, for many years a prominent politician of Central New York, and whose name must be familiar to many of the old residents of that State, died at Utica on the 7th.

The handsome house of E. W. Morgan of Ann Arbor was set on fire and entirely consumed, with all its furniture, on the night of Sunday last, while the family were absent.

Fires of a very destructive character are said to be raging in the woods on the line of the road between Albany and Massachusetts, which have already swept over several hundred acres.

The American anti-slavery society held an anniversary meeting in New York last week, at which its affairs were represented as being in a highly prosperous condition.

The United States Minister at Japan, Townsend Harris, is dead. He died at Yeddo. The death of such a man is felt as a public loss.

At a contest between two horse shoe makers at Troy, N. Y., one made 240 shoes in one hour, and the other 210. This is a contest of muscle worth recording.

Discoveries with regard to counterfeiting being carried on a large scale, and by parties connected with banks and railroads, are said to have been made in New York, that will come out in a short time, when further examinations are made.

The Kentucky Legislature offer a premium of \$1,000 for a cure for the hog cholera.

Twenty-nine children, who went out on a picnic at Camden, S. C., got drowned by the upsetting of a boat.

The anniversaries of the various charitable and religious societies have been held the present week in New York.

The common council of New York have directed the mayor of that city to invite the Prince of Wales to visit that city and be its guest, during his visit to this side of the Atlantic.

ST. CHARLES HOTEL,

Corner of Wood and Third Streets,

PITTSBURGH, PA.

HARRY SHIRLS, - PROPRIETOR.

Mich. Southern and Northern Indiana

RAIL ROAD.

GRAND EXCURSION

TO THE

NATIONAL REPUBLICAN

CONVENTION!

At CHICAGO, May 16, 1860.

HALF FARE from all Stations. Return tickets good from May 16th to 31st.

Return tickets will be issued from MONDAY, MAY 14th to 17th, from all Ticket Stations on the line of this Road and branches, good from May 16th to 31st, to all persons who wish to attend the National Republican Convention during its session and who purchase Tickets to Chicago for that purpose.

Those who wish to avail themselves of this arrangement, must purchase Tickets at the Station where they take the train, as full fare will be collected on the trains, in all cases, and no return tickets will be given out except from Stations where no tickets are sold.

Trains leave Detroit daily at 7:30 A. M. and 7:40 P. M. JNO. D. CAMPBELL, Gen. Sup't.

M. S. & N. I. R. R. Office, Toledo, O., May 4th, 1860. 19 1t

MAGIC COPYING PAPER.

FOR copying letters, Designs, Music, Flowers, Ladies' Patterns, Engravings, &c. This is the most complete article of the kind ever invented, combining the useful and the beautiful. Put up in Packages, various colors, 25 and 50 cents each. Sent by mail to any address, with full directions for use. Address, A. M. ANGUS, Flushing, Mich. 19 3t*

H. C. GILBERT'S NURSERIES,

Coldwater, Mich.

THE UNDERSIGNED would call the attention of

dealers and growers to his large and choice stock of

Fruit and Ornamental Trees, all of which will be ready

For the Fall Trade of 1860.

My assortment contains the following staple articles, all of which will be warranted far superior to Eastern grown trees for Western cultivation:

100,000 grafted Apple trees, 8 and 4 years old.

300,000 do do do 2 years old.

400,000 do do do 1 "

20,000 Peach trees, all choice varieties.

Also,

Dwarf and Standard Pears, Plums, Cherries, Quinces,

Grapes, Lawton Blackberries, Raspberries, Gooseberries,

Strawberries and other fruits of the leading and most

approved varieties.

For Nurserymen

I have several hundred thousand Apple seedlings, 1 and

2 years old; also, choice Ornamental Trees and Flower-

ing Shrubs.

Dealers and Fruit Growers.

Are respectfully invited to look through my stock be-

fore closing contracts for next fall and spring. I have

several neighbors who are embarking largely in the

nursery business, and we are all entirely agreed in one

thing, and that is to make Coldwater a point that cannot

be safely overlooked by any man who wants Fruit and

Ornamental trees.

Come and See us,

and we will engage that you shall be satisfied in the qual-

ity, quantity and terms of sale.

Wanted Immediately,

Local Agents at all prominent points in this and west-

ern States. Also,

20 or 30 Live Men,

as Traveling Agents, to all of whom liberal commissions

will be paid.

18 6m H. C. GILBERT, Proprietor.

NANSEMOND SWEET POTATOES.

THE undersigned being permanently located and en-

gaged in the cultivation of the Lebanon, Yellow, or

Nansemond variety of Sweet Potatoes, offers Plants to

the public at the following LOW PRICES:

400 for \$1.00, 1,000 for \$2.00, 10,000 for \$15.00.

Plants boxed so as to keep good for one to two weeks.

Send in your orders in time. Plants ready by May 1.

Address R. SNELL,

Foster's Crossings, O.

These plants can be obtained and are for sale at

PENFIELD'S Implement and Seed Store, Detroit.

April 9, 1860. 15-6t

Reaping and Mowing Machines.

JOHN REILLY,.....WM. N. ELLIOTT.

REILLY & ELLIOTT,

MANUFACTURERS OF

REILLY'S BADGER STATE

Reaping & Mowing Machine.

JOHN REILLY, PATENTEE.

They also manufacture

Steam Engines, Mill Gearing, Plows, and

all kinds of Castings.

WHITE PIGEON, MICHIGAN.

THIS REAPER AND MOWER took the First Pre-

mium at the United States Fair in Chicago last Fall;

also, at the Wisconsin State Fair in Milwaukee.

White Pigeon, St. Joseph co., Mich.,

April 9, 1860. 15-6m

TREES, SHRUBS AND PLANTS.

WM. ADAIR invites the attention of Planters to his

stock of trees, &c., which is unusually fine the pres-

ent season, viz:

Apples, Pears and Cherries, both Standard and Dwarf;

Plums, Peaches, Apricots, Grapes, Raspberries, Straw-

berries, &c., in great variety.

New Rochelle Blackberry (Lawton), \$1 per doz., \$6

per 100, strong bearing plants.

Wilson's Albany Strawberry, Hooker's Seedling, Jenny

Lind, McAvoy's Superior, Longworth's Prolific, and

many others, at reduced rates.

Seeds of true Hubbard Squash, 40 seeds for 12 cents

in stamps.

Raspberries—Brinkley's Orange, Allen's, Fastolf, Ant-

werp, Belle de Fontenay, and others.

Cranberries—all the best, both old and new—Cherry,

Red and White Dutch, White and Red Grape, Versaille,

Glories des Fables, &c.

Grape Vines—Isabella's, Catawba, Concord, Delaware,

Rebecca, Hartford Prolific, Union Village, Logan, Can-

adian

The Household.

"She looketh well to the ways of her household, and eateth not the bread of idleness."—PROVERBS.

EDITED BY MRS. L. B. ADAMS.

FAR AWAY.

BY E. HATHAWAY.

Oh! my list'ning ear has caught
Echo from the world of thought;
Like to voice of thrilling tone,
Borne unto the spirit lone;
Voice of loved ones seeming nigh,
Breathing in soft rephry's sigh,
Of some fairer Eden-clime,
Balm, and bloom, and vesper-chime,—
Calmly bright Arcadia,
Blest Elysium, Far Away.

Home of beauty, where the sight
Only drinketh in delight;
Where each outward form is rife,
With the inward heavenly life,
Where each orb of steadfast ray
Kindleth on to endless day,
Where ideal goals were prized
In the real realized.
Oh! how glorious though it lay
Dimly in the Far Away.

Where the endless ages wing
On through ever opening spring;
Where the roses' sweetest prime,
Wanes not with the passing time,
Where, delighting sense and sight,
All unknown to frost and blight,
Luscious, ripened clusters shine
On the tender budding vine,
In the summer halcyon-day,
Brightening all the Far Away.

Morning land of love and home!
Oh! thy charmed paths to roam;
Where the waves of crystal rest
Round the islands of the Blest;
Where affluities have wrought
Union of the kin of thought;
Heart to heart, as hand to hand,
Wandering on the golden strand,—
Oh! to linger there for aye,
In the realm of Far Away.

Little Prairie Ronde, Mich.

The Editorial Excursion.

DETROIT TO CLEVELAND—PITTSBURGH—WHEELING.

Pittsburgh, April, 1860.

Dating here from the heart of the Great Pennsylvania smoke house, I send my first pencilings of experience in the way of the grand editorial excursion. It was but last night that our little party left Detroit, and by day light the beautiful May Queen had brought us safely through to Cleveland, though the night was dark and foggy, the lake rough, and a heavy rain falling. She is rightly named the Queen. Her owners, with characteristic liberality, united with the lines of the railroad recognizing the editorial passes from the Baltimore and Ohio Railroad Co. and sent us on our way with rejoicing, untold.

But for a nice little trap we very quietly walked into at Cleveland, we might have had time to see something of that city more than is contained in the narrow space between the steamboat landing and the railroad depot; as it was that was all we did see. The trap is set and sprung in this way. As soon as the boat lands, an anxious faced young man steps aboard and inquires,

"Going south by the Pittsburgh train?"

Inexperienced traveler; "Yes."

Anxious young man; "No time to lose;

twenty minutes past five; cars leave at six."

Inexperienced traveler; "We must have breakfast first."

Anxious young man; "O yes; here is a dining hall close by, step in; everything ready; breakfast in time," &c., &c.

We all hurry in, take seats at a long table, sip a little cold coffee, eat a bit of cold fried ham, very saltish, a little hash very cold and suspiciously red, try a liver-y buckwheat cake, find it made of extract of hops and some gritty substance, look imploringly at waiters, waiters deaf and blind; then fearing the cars will be off, we hurry to the door, where a portly, pleasant-faced man stands holding out his hand, saying, "Half a dollar, ma'am; half a dollar, sir."

No wonder he looks portly and pleasant; he can afford it. We pay the half dollar, and hurry out to find that we have yet an hour and a half to wait for the cars! *Mem.* Next time go to some respectable hotel, get a respectable breakfast and be prepared for the long fast of one hundred and fifty miles between Cleveland and Pittsburgh. There seems to be no dining place on this route, and no time given for hungry traveler to refresh himself from six in the morning till six at night. Weak as I was when I left Detroit, this deprivation, together with the somewhat rough travelling, was very severe for me.—But supper and rest will make all right again.

The scenery through which we have passed to-day is very beautiful. Much of it lies along the Ohio River; indeed, after we left Wellsville, the river was in sight all the way to this city, shimmering, rippling, and glaring along on our right, while to the left rose the abrupt bluffs, often broken into soft spreading valleys containing green fields and bloomy

orchards, and pleasant homesteads, or into deep rocky ravines with water falls dashing down, and little houses perched on the nooks and corners where there was room enough for them to stand; or sometimes into wild chasms where only broken rocks and scrubby cedars and stunted yellow pines could be seen. The hilly waves in the western part of Ohio, through which we passed, and within the vicinity of the river seem to be most promiscuously tossed about, broken up and ground together, and the scenery among might be called gorge-ous in more than one sense.

The rain of Monday night was so severe that at Wellsville, on this road, a stone bridge over one of these deep ravines leading into the river, was undermined, and this morning a heavy freight train in passing over it broke it down, and the cars were plunged headlong into the river at the mouth of the gorge.—They were lying there when we came down to-day, a frightful mass of ruins. It is wonderful that no one was hurt. The locomotive and two or three cars went over safe and all the men were on them. It is fearful to think of what would have been the consequences if it had been a passenger train. We had to walk a long way to get around the ruins and up on the track again to reach the train that is to bring us here.

I never saw such a world of bloom as there is among the orchards all the way down from Cleveland. All kinds of fruit trees are loaded with blossoms. Vegetation is very forward here. The woods and gardens look more like the last of May, than the first. This has been a cool, delightful day to ride, and I have enjoyed it much. We shall try to see something of Pittsburgh to-morrow, and then go on to Wheeling.

L. B. A.

St. Charles Hotel, Pittsburgh, May 3, 1860.

It was a good deal off our regular route to Wheeling to come by the way of Pittsburgh, but we have been a thousand times overpaid for the deviation, in the pleasure we had of seeing so much of Ohio's beautiful scenery, and so many of her pretty towns and villages. All along the route too, from the moment we left home our little party received every attention from the officers of the road, and all the courtesies that could have been anticipated were generously and freely extended to us.

Pittsburgh is worth going a hundred miles out of the way to see at any time, and more especially when one can find such a home as this from which I date, and be so hospitably entertained as we have been since we placed ourselves under the care of the landlord of the St. Charles Hotel. We have been his guests for two nights and nearly two days, and can speak from experience of his liberality and of the excellent arrangements for the comfort of travellers: the bountiful tables, the troops of neat, well trained servants, the rooms, the beds, and indeed all the homelike comforts and luxuries a hungry or weary stranger could desire. To Michigan people coming to Pittsburgh, we commend the St. Charles Hotel. Its location may be seen by reference to the card published in another column.

The weather has been delightful during our stay in this city, and we have taken advantage of it to see all the objects of interest that could be visited in so short a time. The main streets are provided with handsome rail cars by which any part of the city can be reached in a few moments for the trifling of five cents. Stepping into one of these we were taken through full three miles of almost solid blocks of brick and mortar and smoke, to the beautiful cemetery on the green hills beyond. This is one of the loveliest places I ever saw; a still green flowery paradise of rest, with its clean gravelled roads winding all about among the swelling hills and deep green vales along whose sides and over whose summits gleam the varied monuments which pride and love have placed over the remains of those whom they have laid here to sleep. The grounds are entered by a handsome arched gateway of stone; the old woman at the entrance told us there were five hundred acres within the enclosure. The Pittsburghers are very proud of their cemetery, and they have a right to be so. Leaving this peaceful spot with reluctance, not having explored one half its beauties, we went back to the dark, rushing whirlpool of life below.

Our first call was at an extensive glass manufactory, where we saw them go through the process of making tumblers by the hog-head full, from the time the melted material was taken, glowing with a bright orange red heat from the furnace, till it came out on the other side of the building, pressed, roasted, polished, tempered, and perfect into the hands of the busy packers. The glass here is not blown at all, but all pressed in moulds. There are several large glass factories in the city. The next visit was at a nail factory, where hundreds of men and boys are employed in

tending the machines where slips of iron are cut into nails of all sorts and sizes. Double rows of these low, heavy machines extend from end to end down the centre of a long building, and at each one sits a man or boy turning the iron with rapid motion under the powerful cutters which drop them ready headed and perfect into the iron boxes below. Every movement is performed with the precision of clock work and with a rapidity almost inconceivable. Nothing can be heard under that long high roof but the incessant din and roar of machinery. A nail is a very simple common thing to see, but it will always have a new interest to me after this. An iron rolling establishment is connected with the nail factory, and we went in and watched the fearful operations. It is one of the most terrible sights I ever witnessed, to see those men, with their bare arms and necks and faces glowing with the intense heat of the furnaces, carrying about large blocks of metal burned to a brilliant whiteness and dripping with molten particles, placing them under the tremendous power of the rollers whose first touch sends the fiery scales flying about them like a shower of blazing stars, and drawing out and turning the flaming sheets as they lengthen and widen and grow thinner under the powerful pressure. I recollect once being at a museum in Cincinnati where they had an exhibition of the supposed horrors of the infernal regions. It was dreadful enough to look at, and to listen to, and with a little stretch of fancy an imaginative person might feel himself quite at home there, but I think if the artist had visited one of these heavy iron rolling establishments he might have added another touch of terror to the scene. How men can live and retain their humanity in such a place seems wonderful to me.

We lingered so long at these two places, that there was time for only short calls at others. The arsenal grounds and buildings are quite handsome, and we went around the gravelled walks to take a look at the long rows of cannon, and the cords and cords of cannon balls and black shells piled up on each side of the armory. Armed sentinels are kept on duty all the time, pacing up and down in front of the great arched gateway; a most tiresome, idle way of living, one would think, and hardly compensated for by the gay uniform and tinsel epaulettes they wear.

The streets of Pittsburgh are very narrow and not over clean, and the very high, close blocks of unpainted bricks, together with the constant murky state of the atmosphere from the enormous clouds and volumes of coal smoke which roll over and settle down among the buildings give it a gloomy appearance.—The main portion of the city is in an immense basin around one side of which flows the Alleghany and on the other the Monongahela, with their high bluffs, along the summit of which may be seen dwellings and cultivated fields and gardens, while over the green, swelling hills to the east the city stretches up and away till distance and the smoky horizon shut it from sight. Two of us were venturesome enough to climb one of the bold bluffs just where nature opened the way for the Monongahela to come down from its mountain path. This gave us a most charming view of the extent of the city and its environs. The sun was shining above the smoke, and gave us now and then, through the moving clouds below, a glimpse of the point of union between the two mountain streams which form the Ohio. I would not on any account have missed this splendid morning view of the iron city. You cannot see Pittsburgh while you are in it. There it is one tumultuous, blackened whirlpool of business; go up on its embracing hills and look down, to see it as it should be seen.

We are all most favorably impressed with the character and manners of the people of this city of smoke. Every where, in the streets, shops, stores, among the dust and clatter of machinery, among the sooty men and boys at the iron works, the weary, heated, half-melted glass makers, wherever we went all was kindness and attention, every one taking pains to give us all the information curiosity-seekers could desire, and in such a pleasant, friendly way as to make us feel a double pleasure in our pursuit. Not a snobbish answer, a gruff, cross word, or a "mind-your-own-business" sort of look, did one of us hear or see during all our stay, or in all our sight-seeing explorations. The Pittsburghers do not put on airs; they can afford to wear better clothing. Their kindness of heart shows itself in their genuine politeness to strangers, and our brief visit among them will ever be remembered with gratitude and pleasure.

Thursday noon we took passage on the Minerva for a river ride to Wheeling, Captain Gordon generously passing us at half fare though there is much rivalry between the river

and railroad lines of communication. We chose this way rather than return to Wellsville by the cars, as all were anxious for a view of the scenery along the Ohio. The distance is ninety-six miles and all the way on either side the views are very beautiful. I never saw this great river so pure and clear as it is now. Our ride has been a most delightful one, and here we are at Wheeling by day light, Friday morning. It is raining, we hear that the town is full of hungry excursionists, and so prudently remain on board till after breakfast.

There was no chance to visit a single place at Wheeling, for by the time we were off the boat, there was a general rush of editors for the cars, ourselves among the number.

L. B. A.

Noted People of the Bible.

BY SLOW JAMIE.

NUMBER SEVENTEEN.

Miriam.—By the banks of the riv'r Nile, there once stood a little girl six or seven years of age. The pictures represent her as very beautiful, and if she resembled her brother they are correct. The large and fragrant flowers of a tropical clime bloomed by the water edge, but she heeded them not; the sun beat upon her tender head, but she disregarded his heat; for her mind was full of anxiety for the fate of her baby-brother whom her mother had that morning with bitter tears and many prayers committed to the waters.

At length the Princess, attended by her maidens, comes down to the stream. And now her heart beats high. Will they throw it into the deep water to drown as required by law? or will they spare its life. The baby is crying and they endeavor to soothe it. Now is her time to act. With a tact beyond her years, she steps forward, and in the guise of innocent officiousness, inquires whether she will bring a nurse. She is successful, and that night the babe, restored to its joyful parents, reposes under the protection of that power which lately sought its destruction.

Eighty years have passed away—eighty years of weary bondage to Miriam, and still she is living—still in full vigor of life, for a green old age seemed to belong to the whole family. But at last deliverance came. Six hundred thousand footmen with their families and numerous herds of cattle, took a joyful farewell of the land of bondage. For a few days, they joyfully pursued their way, but soon their happiness met with a sudden check. Encamped by the shore of the Red Sea, they were overtaken by the enemy. The rattling of the shields and bucklers, the rumbling of chariot wheels, can already be heard. The mother clasps the infant close to her bosom, as she thinks of the hoofs under which it will shortly be margled. The prattling child clings closer to the mother's skirts as he sees the gleaming of the sword, which will cut off his head. The fears of the children increase the parents' grief, and the grief of the parents reacts on the children. Nor was the idea of being carried back by the insolent conqueror, less terrible than speedy death.

In all the tumult there is one alone that is calm, and on him the eyes of that vast assembly are turned. He is known by his portly figure, and dignified bearing. He carries a simple rod in his hand. He is surrounded by the heads of the tribes, and has assured the people of divine protection, but now he is in a deep reverie, as if communicating with the unseen power. The armed foe is drawing near. Already are they drawing out their ranks, and lengthening the wings to prevent escape. Hatred, triumph and scorn can be described in their countenances. The princes surround their leader in silent suspense, but the multitude become tumultuous in loud complaints. At length he speaks and orders the people to move forward. The princes of the congregation give the word to the captains, the captains to the heads of thousands, and they communicate it to the people. Soon the great mass is in motion; as they come close up to the water edge, the leader waves his rod; and the stormy elements recede.—A pathway is opened in the sea, and the immense crowd go down into the ancient bed of the water.

But why does Miriam's eye dilate with a wilder joy than that of the other matrons?—Why does her bosom heave with a higher rapture? That eminent man whom the elements respect, and the people revere, is the little child over whom she had rejoiced eighty years ago.

The next morning like one in the vigor of life, Miriam, timbel in hand, headed the procession which went forth in a dance of thanksgiving. She also lead the maidens of Israel in a triumphal song.

It is a pity that so amiable a character should not be left without a stain. This, however, was not the case. Like the brothers and sisters of Napoleon, she and Aaron

seem to have been jealous of the influence which their brother's wife exercised over him. Perhaps the high respect which Moses paid Jethro helped to increase this feeling. Zipporah herself seems to have been a very unassuming woman, for we hear nothing about her. They called her an Ethiopian, either because she was darker in complexion than the Israelites, or perhaps because she had a mixture of Ethiopian blood. Her father was a Midianite, and descended from Abraham, but by her mother's side she might have been Ethiopian.

They were reproved by a divine oracle, and in addition to this admonition, Miriam was struck with a terrible disease. Her skin was covered with a white scurf. Aaron examined it and found it genuine leprosy. He was horrified at the idea that her flesh would rot away in time, with the loathsome mortification. At his entreaty, Moses made intercession for her, and the disease was removed, but she was required to humble herself by staying seven days out of the camp. Her example teaches us the danger of pride. This remarkable woman lived till the last year of the wanderings of the Israelites, and died but a short time before her younger brothers. She must have been at least a hundred and twenty-six years of age when she died.

It is conjectured that Hur who, in conjunction with Aaron, held up Moses' hands while Joshua fought the Amalekites was Miriam's husband. It is also supposed that Hur resisted the making of a calf in the wilderness till he was killed by the mob, as we do not hear of him after that. These conjectures have no other authority than Jewish tradition, but they are highly probable. If so, it is remarkable that Miriam should become a widow so soon after the deliverance from bondage, that she should die immediately before they entered the promised land, and even in the very time of her birth she was unfortunate, for she was born about the time the Egyptian bondage became cruel and severe. Her name, the same in Hebrew as Mary in English, signifies *Lofty*. And she was high minded, but like many high minded people, she had an unusual share of misfortunes.

In the last paper I am made to say that common air is composed of hydrogen and nitrogen, instead of oxygen and nitrogen. In the paper before, the life of Moses is divided into three periods of 43 years each—read 40. S. J.

Household Varieties.

A SONG OF SPRING.

BY W. W. CALDWELL.

The skies are blue, the valleys green,
And little May-bells now are seen
With cowslips blooming gaily;
And far and near,
The fields appear
In brighter colors daily.
Come all who in the spring delight,
Enjoy the world and praise right
The goodness so paternal,
That clothes again
The hill and plain
With leaves and blossoms vernal.

—Boston Transcript.

Miss Lander, the famous sculptor, is a sister of Col. Lander, who figured so extensively in the matter between Messrs. Pryor and Potter.

Mrs. Margaret Preble, aged ninety-nine years ten months and six days, died on the 6th ult. at the residence of her son-in-law, in Pendleton county, Ky. She was born in Pennsylvania, and lived to see the grandchild of her great grandchild.

The Oswego Times tells a good story of a fashionable lady of that village, whose parents are not possessed of wealth in proportion to her pretensions, who excused herself to a visitor for doing housework, thus: "Mother and I do our own housework, because it is exceedingly romantic."

A correspondent of the Boston Transcript writes from Florence, Italy, thus: "Florence seems now to be almost under the shadow of Boston, so frequent and regular are the means of communication. Massachusetts people outnumber all others here, and it is not strange that Florence should be in such favor with them, as Tuscan civilization, in its social, literary and artistic excellence, is so much like that to be coveted by an extremely advanced people. The advantages offered for instruction in Florence are very great, and many foreign families with children to be educated, do not fail to avail themselves of them."

Names of Utensils Enigmatically Expressed.

- No. 1. A stannic, patelliform, semi-incavated perforated, distular handled separator.
- No. 2. A circular concavo-convex, octa-costal, tensa, portable screen.
- No. 3. A ferreous, furcated, acuminate, curved, ligneous handled implement.
- No. 4. A ligneous, pettinal, terete dentated, binary arcuate braced, wand like hatted gleaner.
- No. 5. A metallic, asecular, monococular filament-bearer.

J. W. E., Plymouth.

Charade.

My first is a statesman.
My second is an interjection.
My third is very cautious.
These joined together form the name of a large bird a native of the Moluccas and New Guinea.

MONYMEUSE.

Answer to Poetical Enigma of April 28th—*INDIANA.*
Answer to Scriptural enigma—*WILLIAM HEATHCOTE DELANEY.*

RECOMMENDATION TO FARMERS IN
SELECTING THE BEST MOWER AND
REAPER.

The committee on Agricultural Implements of the last New York State Fair, held at Albany, say to farmers:

"We think the improvements put upon this machine (KIRBY'S AMERICAN HARVESTER) since the last State Fair, justify it to the award; and that the most valuable machine or implement for the farmer, either newly invented or an improvement on any now in use."

GLADDING'S
HORSE PITCH FORK!
Manufactured by S. Bullock.

THIS VALUABLE improvement possesses many important advantages over all other forks, among which are the following: The times being allowed to drop to discharge its load, the tilting of the handle, and the utmost facility and ease in unloading beneath the beams, and other places where other horse forks cannot be used. It can in all cases be managed with greater ease than any other horse fork. It is equally adapted to stacking. With this fork a ton of day may be unloaded in from 5 to 7 minutes.

TESTIMONIALS.
Its simplicity, durability and perfect operation as well as comparatively trifling expense, recommends its use to the farmers of our country.

Decidedly the best I am acquainted with.
A. E. KAPP.
A valuable labor saving implement.
J. R. FALMER, Genesee Seed Store.

It possesses several advantages over the horse fork commonly used.
The best machine for the purpose within our knowledge, and therefore commend it to the attention of all interested. It must prove a decided acquisition in the haying season, when both time and labor are money.

It will prove a wonderful labor saving machine. I believe wherever tried it will be found profitable.
JOHN JOHNSON, Geneva.

Unloading hay at the barn by horse power is such a simple operation that it seems wonderful how a sensible farmer can continue the exceedingly hard labor of lifting it a forkful at a time in the stifling heat of a July afternoon.
N. Y. Tribune.

The best apparatus for unloading hay we are acquainted with.—*Genesee Farmer.*

Gladding's Horse Pitch Fork is one of the labor saving machines which will pay to purchase.—*Prairie Farmer.*

Unloading in a barn by means of a Horse Pitch Fork is becoming quite common in some sections of our country, and will be practiced every where as soon as the farmers understand the operation. The invention of C. E. Gladding is the best we have seen in operation.—*Am. Agriculturist.*

C. E. Gladding has constructed a Fork which after a recent trial we are satisfied is an important improvement.—*Albany Cultivator.*

The above testimonials are selected from many others, the signers being generally known as distinguished agriculturists. All who have seen it operate, agree in the above opinion of its merits. This fork has taken the First Premium at every Fair at which it has been exhibited, including the State Fairs of Pennsylvania and New York for 1885; and New York, Illinois, Michigan and United States Fairs at Chicago for 1885, besides numerous County Fairs.

Fork, Rope and Pulleys \$12. State and County Rights for sale. Address
STEPHEN BULLOCK, AGENT,
Columbia X Roads, Bradford Co., Pa.

AMERICAN AND FOREIGN
STEREOSCOPIC EMPORIUM.

E. ANTHONY,
308 Broadway, New York.

After May 1st, 1886, at 501 Broadway, two doors from the St. Nicholas Hotel.

THE Stereoscope is the most instructive, interesting, entertaining, amusing, and exciting of modern inventions.

None are too young, none too old, none too intelligent, none too uneducated, to acknowledge its worth and beauty.

No home is complete without it, and it must and will penetrate every where.

It presents to your view every part of the world, in all the relief, boldness, perspective, and sharpness of detail, as if you were on the spot.

Photographers are everywhere exploring Europe, Asia, Africa, America, in search of the grand and the beautiful, and the results of their skill are constantly enriching our stock.

We have an immense variety of paper Views of Scenes in Paris, London, England, Scotland, Ireland, Wales, France, Belgium, Holland, Switzerland, Spain, The Rhine, Versailles, St. Cloud, Fontainebleau, Versailles, Italy, Turkey, Egypt, the Holy Land, China, India, Crystal Palace, and Groups of Historical, amusing marriage scenes, breakfast scenes, picnics, statuary, &c., &c. An exquisite assortment of illuminated Interiors of Palaces, Churches, and Cathedrals of France, Italy, &c. The effect of these illuminated views is marvellous.

Every gentleman of wealth and refined taste should have in his drawing-room some of our exquisite views on glass, with a revolving stereoscope, showing 12, 25, 50 or 100 scenes. Nothing can be more fascinating, and one can offer no greater treat to a friend fond of the picturesque and beautiful.

Anthony's Instantaneous Stereoscopic Views are the latest Photographic wonder. They are taken in the fourth part of a second, and everything no matter how rapidly it may be moving, is depicted as sharply and distinctly as if it had been perfectly at rest. This gives an additional value, for to the beauties of inanimate nature it adds the charm of life and motion. The process is a discovery of our own, and being unknown in Europe, we receive from London the Paris large orders for Anthony's Instantaneous views of American life and scenery.

Among other things we have just published Stereoscopic illustrations of a scene of the famous Niagara Falls. The pictures are so arranged that they may be seen in the most interesting manner. The particulars of this will be found in our catalogue.

Our catalogue of subjects and prices will be forwarded to any address on receipt of a note or check for the price of the catalogue, or a note or check for the price of the catalogue, or a note or check for the price of the catalogue.

Parties at a distance sending us \$3, \$5, \$10, \$15, \$20 or \$25 can have a good instrument and such pictures as they may request, sent by Express.

Views alone, (without instrument) can be sent by mail.

Parties who wish to be advised of everything really valuable in the line that comes out, may send us their names to place on record, and we will keep them posted at our own expense.

Men of leisure and mind find Photography a most fascinating and delightful amusement. We are prepared to fit out amateurs with everything necessary for their success together with instructions "How to take Stereoscopic Pictures."

Importer and Manufacturer of Photographic Materials, Stereoscopes and Stereoscopic Views.

Merchants from every section of the country are invited to make an examination of our stock, as our discount to the trade will be liberal.

To Photographers.—First class stereoscopic negatives wanted. Send by mail a print unmounted, with price of Negative.

[Cut this out for future reference.]

DEALERS IN FRUIT TREES

WILL find at the subscribers a very large stock of trees and plants, suited to the fall trade—500,000 3 year apple trees, with other stock to correspond.

Persons selling, or about to sell trees in the west, for fall delivery, are invited to make us an early call. We are disposed to deal liberally with them, and furnish them with trees and plants to suit the climate of the west, saving them the exposures attendant on shipments from nurseries four or five hundred miles eastward. A few intelligent, industrious men can obtain agencies for sale of our stock.

A large trade has heretofore been done at this place, in trees shipped for the east, but this year our neighbors have also good stocks of their own growth. We have always raised our own trees offered for sale. Our premises are at the head of Broadway, 3 miles above the Olive house. Address as below.

HALL & CO., Hickory Grove Nursery, Toledo, Ohio.

THE WETHERFIELD SEED SOWER

FOR SALE at
PENFIELD'S, 108 Woodward Avenue.

1886. SUMMER ARRANGEMENT. 1886.

MICHIGAN SOUTHERN
AND
DETROIT, MONROE and TOLEDO
RAIL ROAD.

MONROE, CHICAGO, TOLEDO, CINCINNATI AND CLEVELAND LINE.

With its connections, forms a Through Route from Detroit to Monroe, Adrian, Chicago, Toledo, Sandusky, Cleveland, Dayton, Hamilton, Cincinnati, Pittsburgh, Wheeling, Philadelphia, Baltimore, Washington, Erie, Dunkirk, Buffalo, Albany, New York, Boston, Montreal, Quebec, Portland, Roussell Point and all points interior, in Ohio, Pennsylvania, New York, and the New England States, and all points West and South West.

On and after Monday, April 9th, 1886, Passenger Trains will run as follows:

ARRANGEMENT OF TRAINS.

FROM DETROIT—Mail and Express, daily, except Sunday, at 7:20 A. M.; arriving in Toledo at 10:15 A. M., connecting with the Express Train from Toledo at 10:30 A. M. (via old road), arriving in Chicago at 8:15 A. M. Chicago and Cincinnati Express, daily, except Sunday, at 7:40 P. M., arriving in Toledo at 10:35 P. M., Adrian 11:20 P. M., connecting with the Lightning Express Train for Chicago (via old road), arriving in Chicago at 8:00 A. M.

TOLEDO ACCOMMODATION, daily, except Sunday, at 12:15 P. M., arriving in Toledo at 4:00 P. M., connecting with Express train for Cleveland, Buffalo and New York.

FROM CHICAGO—Mail and Express, daily, except Sunday (via old road), at 6 A. M., arriving in Toledo at 8:00 A. M., making connection with 4:05 P. M. train from Toledo at Air Line Junction, arriving in Detroit at 6:50 P. M.; Chicago and Montreal Express, daily, except Saturday, at 8:00 P. M., via old road and Adrian, arriving at Detroit at 7:05 P. M.

FROM TOLEDO—Chicago and Montreal Express, daily, except Sunday, at 4:15 A. M., arriving in Detroit at 7:05 A. M.

Mail and Express, daily, except Sundays, at 4:05 P. M., arriving at Detroit at 6:50 P. M.

Detroit Accommodation, daily, except Sundays, at 11:00 A. M., arriving in Detroit at 8:00 P. M.

CONNECTIONS:

Trains from Detroit connect at Adrian with Michigan Southern Main Line for Chicago, with New Albany and Salem Railroad, at the crossing of that line, and at Chicago with all roads for the Northwest and South.

Connect also at Adrian with Jackson Branch Trains for Jackson.

Connect at Toledo with Dayton and Michigan Road, for Dayton, Hamilton and Cincinnati; with the Cleveland and Toledo Road, for Sandusky, Cleveland, Pittsburgh, Dunkirk, Buffalo, Albany, Boston and New York; with Wabash Valley Road for Port Wayne, and points Southwest, and with Air Line Railroad for Bryan, Kendallville, Ligonier and Goshen.

Trains from Chicago and Toledo connect at Detroit with Grand Trunk Railroad of Sarnia, Toronto, Prescott, Montreal, Quebec, Portland and Boston; with Great Western Railway for Niagara Falls, Buffalo, Albany, New York and Boston, and with Detroit and Milwaukee Railway, for Grand Rapids, Grand Haven and Intermediate Stations.

Freight Trains leave daily, except Sunday, as follows: **FOR TOLEDO**, at 12:15 P. M., arriving at Toledo at 4:00 P. M.

FOR CHICAGO, at 4:00 P. M., arriving at Chicago at 8:05 P. M.

Trains are run by Chicago time, which is Twenty Minutes slower than Detroit time.

Woodruff's Patent Sleeping Cars accompany all night trains on this route.

Time and Fare the same as by any other Rail Road route.

No change of cars between Detroit and Chicago. Baggage checked through to all points East & West.

J. D. KEEFE, General Sup't, Toledo, L. P. KNIGHT, Agent, Detroit.

CAHOON'S PATENT
BROADCAST SEED SOWER!

For Sowing Wheat, Oats, Barley, Grass Seeds, &c.

THE HAND MACHINE sows from four to eight acres per hour at a common walking gait, throwing out Wheat about forty feet wide and Grass Seed twenty feet.

THE HORSE POWER MACHINE at the usual walking gait of a horse sows from ten to fifteen acres per hour, throwing out about sixty feet wide.

The vast superiority of this machine over all others, as shown in the perfectly regular and even distribution of the seed, and the wonderful rapidity with which the work is performed, combined with their perfect simplicity and durability, have placed them in the front ranks of labor saving agricultural implements.

A saving of three-fourths of the labor and one fourth of the seed used in hand sowing is effected by using these machines. A person entirely unused to sowing by hand, can use either machine with perfect success. They are warranted to give perfect satisfaction and to save their cost in less time than any other farm implement yet introduced.

Large numbers of these machines have been sold, and in all instances, when proper care has been used in their operation, they have given the most perfect satisfaction. These machines can be purchased of Agents in all the principal places in the State. For further particulars address
P. B. SANBORN,
General Agent for Michigan and Western Canada.
Office at B. & W. R. Noves' Hardware Store, 86 Woodward Avenue, Detroit, Mich.

THE WILLIS' STUMP PULLER

Is the most powerful and most economical machine in use for pulling stumps, and will clear a field in less time than any other invention of a like kind.

It is a simple machine, and can be run by a single man in an hour and fifteen minutes. The undersigned will sell machines and rights to use and manufacture in any part of Michigan except the counties of Hillsdale, Branch, Wayne, Jackson, Calhoun, Cass, Kalamazoo, Van Buren, Macomb, Genesee, Shiawassee, Saginaw, and St. Clair, which are already sold.

All necessary information as to prices, and mode of using, will be given on application to
DAVID BLACKMAR, Ypsilanti.

or to R. F. JOHNSTONE, Editor Michigan Farmer. The machines are manufactured at the Detroit Locomotive Works from the best Lake Superior Iron. [9]

THE PEOPLE'S MILL.

FOR SALE at PENFIELD'S AGENT'S WAREHOUSE, at manufacturing prices, freight added; and can be seen running in this city, Detroit, Mich. 58 ft

Wilson's Albany Seedling Strawberry.

FOR SALE, Fifty Thousand, at five dollars per thousand, or three dollars for five hundred, packed in moss and delivered at the Express or R. R. freight office. W. H. HAYS, Bridgewater, Oneida Co., N. Y.

SUBSOIL AND JOINTER PLOWS,

Manufactured by
Burnham & Co., Battle Creek, Michigan.

Price of Subsoil Plow for one team, with draft rod, \$8.50.
Price of the Curtis Jointer, or double Plow, for one team, \$14.00. 19-3m

New Rochelle, Lawton, Blackberry.

FINE PLANTS, carefully packed and sent according to directions, at One Dollar per dozen. Five dozen for Four Dollars; ten dozen for Six Dollars. Direct to 19-4t CHARLES BETTS, Burr Oak, Mich.

IT IS NOT TOO MUCH TO SAY
SINCE ALL,OLD AND YOUNG,
AFFIRM ITS TRUTH.

Viz: That Professor Wood's Hair Restorative

Will preserve infallibly the growth and color of the hair, if used two or three times a week, to any imaginable age. Perfectly restores the gray, covers the bald with nature's own ornament, the hair; make it more soft and beautiful than any oil, and preserve the scalp free from all diseases to the greatest age. Stationers, Judges, Attorneys, Doctors, Clergymen, Professional men and Gentlemen and Ladies of all classes, all over the world, bear testimony that we do not say too much in its favor. Read the following and judge:

Hickory Grove, St. Charles Co., Mo., Nov. 19, 1887.
Prof. C. J. Wood—Dear Sir: Some time since we were induced to use some of your Hair Restorative, and its effects were so wonderful, we feel it our duty to you and the afflicted, to report it.

Our little son's head for some time had been perfectly covered with sores, and some called it scald head. The hair almost entirely came off in consequence, when a friend, seeing his sufferings, advised us to use your Restorative; we did so with little hope of success, but to our surprise, and that of all our friends, a very few applications removed the sores entirely, and a new and luxuriant crop of hair soon started out, and we can now say that our boy has as healthy a scalp, and as luxuriant a crop of hair as any other child. We can, therefore, and do hereby, recommend your Restorative, as a perfect remedy for all diseases of the scalp and hair. We are yours respectfully,

GEO. W. HIGGINBOTHAM.
SARAH A. HIGGINBOTHAM.

Prof. Wood—Dear Sir, My hair had, for several years, been becoming prematurely gray, accompanied by a bariness which rendered it very difficult to wear in dressing it. When I commenced using your Hair Restorative about two months ago it was in that condition; and having continued its use till within the last few days, it has turned to its natural color, and assumed a softness and lustre greatly to be preferred to those produced by the application of oils or any other preparation I have ever used. I regard it as an indispensable article for every lady's toilet, whether to be dressed in a great deal of hair, or the simple purpose of dressing or beautifying the hair. You have permission to refer to me all who entertain any doubt of its performing all that is claimed for it.

MRS. C. SYMONDS.
114 Third St.
Wellington, Mo., Dec. 6, 1887.

Prof. Wood—Dear Sir: By the advice of a friend of mine, who had been using your Hair Restorative, I was induced to try it. I had the fever, some time last May, and nearly every hair in my head came out. Now my hair has come in a great deal thicker than ever it was. Nothing but a duty and sympathy that I feel to communicate to others who are afflicted as I have been, would induce me to give this public acknowledgment of the benefit I have received from Prof. Wood's Hair Restorative. I have used it for some time, and it has done me good. The Restorative is put up in bottles of 8 sizes, viz: large, medium, and small; the small holds 3/4 of a pint, and retails for one dollar per bottle; the medium holds at least twenty per cent. more in proportion than the small, retails for two dollars per bottle; the large holds a quart, forty per cent. more in proportion, and retails \$3.

O. J. WOOD & CO., Proprietors, 312 Broadway, New York, (in the great N. Y. Wire Railing Establishment), and 114 Market St., St. Louis, Mo.

Dealers: all good Druggists and Fancy Goods Dealers. 16-3m

SUMMER COMPLAINTS.

Viz: Diarrhea and Cholera Morbus, and Flatulent and Spasmodic Colics.

WE, the undersigned, have for several years past sold

B. FOSGATE'S ANODYNE CORDIAL, and during this period have witnessed its salutary effects in curing the diseases for which it is recommended, viz: **Acute and Chronic Diarrhea and Cholera Morbus.**

In our own, and in the families of our customers, and have also seen its successful administration in cases of **CHOLERA INFANTUM.**

We do, therefore, confidently recommend it to all those who may be afflicted with those distressing and dangerous complaints, as offering one of the best means for their cure.

W. C. TUTTLE, General Agent, Auburn, N. Y.

J. J. FOOT, Hamilton, J. OSBORN, Seneca Falls, L. KELLY & Co., Geneva, S. WHITE & Son, Fredonia, L. REDDY, Penn Yan, A. P. CURTIS, Attica, F. RICH & DILLAY, Syracuse, W. HAYES & Co., Oswego, C. J. O'NEILL, Cortland, J. G. BAILEY, LeRoy, H. E. GAYLORD, Cleveland, T. BEADIE, Elmira, G. G. GILLET, Ashtabula, A. L. MATTHEWS, Buffalo, G. G. GILLET, Erie, L. B. SWAN, Rochester, CARTER & BRO., Erie, N. B. It is particularly useful to children when teething, as it allays irritation, induces moderate perspiration and produces sleep.

Price 25 CENTS. For sale by J. S. CUTHBERT & Co., Detroit; FARMER & BEELEY, Detroit; T. J. HINGHAM, Detroit; and by Dr. C. N. TUTTLE, General Agent, Auburn, N. Y.

NORTHVILLE FOUNDRY
and Machine Shop.

IN the village of Northville, at the old stand of C. G. HARRINGTON, may be found a large stock of the

LATEST IMPROVED PLOWS, of every style and variety now offered in the Eastern or Western market. Plows which for durability and lightness of draught, are equalled by few and surpassed by none. The subscriber is also manufacturing

Cultivators, Drags, Sawing Machines, Iron Wares,

and in fact almost everything that can be cast, carved or turned, necessary to meet the growing wants and increasing demands of the Farmer and husbandman. A large and experienced workmen of long experience and well established reputation to superintend every department of the business, he trusts his facilities for the manufacture of all the above mentioned works, also, for

REPAIRING most kinds of Machinery, are equalled by very few in the State.

Feeling thankful for the large and liberal patronage which he has heretofore enjoyed, he would here say, that he still hopes by untiring diligence and prompt attention to business, not only to retain all of his old friends and customers, but greatly to enhance the number at the expiration of the present year.

C. G. HARRINGTON.
Northville, Mich., March 27, 1886. 14 St

EGYPTIAN CORN.

THE subscriber offers to farmers throughout the country the EGYPTIAN CORN, which upon trial was found to ripen placed over the first of July. It is estimated, from its very prolific qualities, to yield 200 bushels per acre, and weighs by sealed measure 50 pounds to the bushel. This Corn was produced from some procured direct from Mr. JONES, our Consular Agent, directly on his return from Egypt.

It needs no different culture from that of other varieties, and in the South two crops can be raised. The reason on the same ground. It grows in the form of a tree, and twenty-two ears have grown upon one stalk, and will average from five to fifteen. For domestic use it is unparalleled. When ground and properly boiled, it is equal in color and siveness to wheat flour. As a forage crop, by sowing in drills or broadcast, for early feed, there is no kind of corn so well adapted to milk cows, and none that will yield half the value in stalks or corn.

It can be successfully grown in any State of the Union from Maine to Texas. I can give the most satisfactory references that the corn is, in every respect, what I represent it to be, and further, I am the only person throughout the country who has this variety of corn. I have secured a quantity, and am now able to fill all orders, for those desirous of testing it.

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Give your full name, post office, county, and State written plain, so that no errors may occur.

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